



Department of
Veterans Affairs



Veterans
Health
Initiative



Post-Traumatic Stress Disorder: Implications for Primary Care

Independent Study Course
Released: March 2002

Sponsored by
Department of Veterans Affairs
Employee Education System
and The National Center for PTSD



Employee Education System

This is a Veterans Health Administration System-Wide Training Program, sponsored by the Employee Education System, the Office of Public Health and Environmental Hazards, and the National Center for PTSD, Department of Veterans Affairs.



**DEPARTMENT OF VETERANS AFFAIRS
UNDER SECRETARY FOR HEALTH
WASHINGTON DC 20420**

MESSAGE FROM THE UNDER SECRETARY OF HEALTH

Dear Colleagues in Quality Health Care:

I commend you for choosing to take advantage of this self-study program, "Post-Traumatic Stress Disorder: Implications for Primary Care." It is increasingly recognized that PTSD affects not only the emotions and quality of life of many of our veterans, but also their physical health. PTSD is associated with neurobiological dysregulation, self-perceived health problems, increased rates of physician-diagnosed illness, and higher rates of utilization of medical services.

It is important that we identify those veterans with PTSD so we can provide them with the highest quality care available. Primary care staff can play a key role in identifying these patients and getting them the help they need. We hope that this self-study program will increase the ability of staff to recognize, refer to treatment, educate and support veterans with PTSD and their families. It should also provide us all with a better understanding of and more compassionate appreciation for the needs of veterans who are experiencing this life-altering condition.

This program is one of the educational modules of the Veterans Health Initiative (VHI). The VHI is intended to focus greater attention on the connection between significant events that occurred during military service and later health conditions. Greater understanding by VA providers of such linkages and of recommended evaluation and treatment approaches should contribute to enhanced health care and satisfaction for veterans.

I would like to encourage you to participate in the other VHI educational modules. These modules form a wide range of topics directly related to veterans' military service and subsequent need for healthcare.

Thank you for your participation in the VHI program and your service to veterans.

A handwritten signature in black ink, appearing to read "Thomas L. Garthwaite".

Thomas L. Garthwaite, M.D.



Post-Traumatic Stress Disorder: Implications for Primary Care

ii

Table of Contents

Page

Message from Under Secretary for Health	i
Executive Summary	iv
Independent Study Outline (Purpose, Objectives, Outcome, Target Audience and Format) ..	viii
Program Description	ix
Program Development (Contributing Authors, Program Development and Planning Committee, Program Director, Program Support Assistant and others)	xi

Content Materials

Chapters

I. INTRODUCTION

1. Why Screen Veterans for Traumatic Stress	1
2. Obstacles to Detection of Traumatic, Stress-Related Problems	4
3. A Rationale for Routine Traumatic Stress Screening in VA Health Care Settings ..	7
4. The Role of Health Care Providers	9

II. BACKGROUND INFORMATION ABOUT TRAUMATIC STRESS

5. The Nature and Impact of Traumatic Stress	11
6. Women and Sexual Trauma	23
7. Men and Sexual Trauma	30

III. GUIDELINES FOR SCREENING FOR TRAUMA-RELATED SYMPTOMS

8. Screening and Referral Procedure Overview	32
9. Implementing Screening Procedures	34



Post-Traumatic Stress Disorder: Implications for Primary Care

iii

IV. EFFECTIVELY WORKING WITH TRAUMA SURVIVORS

10. Treatments for PTSD	45
11. Pharmacotherapy for PTSD	51
12. Medical Compliance/Preparation for Medical Procedures	58
13. The Patient-Provider Relationship: Setting Boundaries	62
14. Special Considerations: The Compensation-Seeking Veteran with PTSD	69
15. Models of Care	73

V. COMMONLY ASKED QUESTIONS ABOUT PTSD

76

VI. REFERENCE MATERIALS

Appendix A: Algorithm for Assessment of Trauma Symptoms in Veterans	91
Appendix B: Quick Reference Guide	92
Appendix C: “Understanding Trauma and PTSD” Patient Information Sheet ...	129
Appendix D: Screening Tools	139
Appendix E: Patient Protection and Advocacy	145
Appendix F: “Physical health and post-traumatic stress disorder: Review and synthesis” (Schnurr & Jankowski, 1999)	148
Appendix G: References	158
Appendix H: Annotated Bibliography	166

VII. TESTING AND EVALUATION MATERIALS

Independent Study Test Questions for CME Credit	184
--	------------

Independent Studies Registration Form



Post-Traumatic Stress Disorder: Implications for Primary Care

iv

EXECUTIVE SUMMARY

Have you ever encountered patients who are...

- 1. irritable or hostile?*
- 2. avoidant of medical appointments?*
- 3. chronically poor in self-care health habits?*
- 4. exhibiting confusion or poor memory when being interviewed about health?*
- 5. stoic and reluctant to admit to health problems, or extremely needy and/or demanding?*
- 6. extremely reluctant to follow up on any intrusive or gynecological examinations?*
- 7. more likely to present in emergency than for regularly scheduled appointments?*
- 8. presenting with a history of alcohol/substance abuse, depressive symptoms, chronic relationship difficulties and/or intermittent employment history?*
- 9. presenting with hypertension and atherosclerotic heart disease, abnormalities in thyroid and other hormone functions, frequent infections and immunologic disorders, and/or problems with pain perception, pain tolerance and chronic pain syndrome?*

Patients with Post-Traumatic Stress Disorder (PTSD) and/or histories of trauma are likely to present to primary care with some (or many) of these characteristics. Their behavior can interfere with patient-provider communication, impede compliance with treatment regimens, and generally, frustrate the practitioner. These patients are at high risk for deteriorating health.

Most trauma victims do not seek mental health services. Instead, they look for assistance and care in the primary care setting.

Medical providers in VA frequently encounter patients with PTSD (often undiagnosed) related to severe prior traumas (especially combat, sexual assault while in the military, prisoner-of-war experiences or childhood physical and sexual abuse). PTSD has profound effects on physical and emotional health and social functioning; it also influences health care utilization and a patient's ability to interact effectively with the health care system. To increase the identification of PTSD, medical providers should routinely screen for PTSD, using simple available instruments. Medical providers also should routinely screen for exposure to traumas, including combat, sexual assault and domestic violence. Effective treatments for PTSD (both psychotherapy and pharmacotherapy) are available, so most patients should be referred to mental health to confirm the diagnosis and initiate treatment. Being able to help those with PTSD better understand their problems and find real help in addressing them can be very gratifying for the practitioner.



Post-Traumatic Stress Disorder: Implications for Primary Care

Most trauma victims do not seek mental health services. Rather, they look for assistance and care in the primary care setting. In fact, most mental health treatment is delivered by non-psychiatrist physicians or nurses. Research suggests that most previously traumatized patients do not object to being queried about their trauma history in a primary care setting. While treatment-seeking patients do not typically disclose personal trauma histories spontaneously, they usually will provide this information if queried directly.

WHAT PRIMARY CARE PRACTITIONERS NEED TO KNOW ABOUT PTSD

This manual describes why routine screening for traumatic stress symptoms is crucial in the primary care setting, how often the primary care provider should screen for PTSD and other trauma-related conditions, and how screening in the primary care setting can have an impact on both physical and emotional/behavioral/social health.

Because addressing the topic of trauma presents real challenges to both practitioners and their patients, there is also a discussion of **provider and patient attitudes** that impede detection of PTSD and ways to ameliorate these barriers. It describes the **nature** of trauma and the **diagnoses** associated with trauma exposure (including post-traumatic stress disorder and acute stress disorder) and **other psychiatric conditions and features** associated with trauma exposure.

Traumatic experiences that happen to one member of a family can have an effect on everyone else in the family, and the primary care practitioner may see similar trauma-related behaviors in both trauma survivors and in **family members or caretakers**. A number of common reactions of family members are described.

Because traumatic stress is associated with increased health complaints, health services utilization, morbidity and mortality, the **effects of trauma and PTSD on physical health** are described, as well as the behavioral effects of trauma that might indirectly affect physical health. Some different traumatic experiences, current stressors and presentations of **veterans of different wars** also are briefly outlined.

Information on the consequences of **sexual trauma** and the rationale for screening for sexual trauma is included. This is in accordance with the recent VHA mandate that all veteran patients be screened for the presence of military sexual trauma. Although rates of sexual assault of both male and female veterans are quite high, most have never been asked by their primary care provider about a history of sexual trauma and few survivors are likely to spontaneously offer sexual trauma history. However, the overwhelming majority of women indicate that they would like to be asked about sexual trauma history.



Post-Traumatic Stress Disorder: Implications for Primary Care

vi

GUIDELINES FOR SCREENING FOR TRAUMA-RELATED SYMPTOMS

Recommended **PTSD screening and referral procedures** are presented, and a **screening tool** that has been designed to identify trauma-related problems in the primary care setting is described.

The discussion of screening results with patients requires some skill. Specific guidelines assist the clinician in providing the appropriate context for discussing screening results, asking about trauma history, discerning whether traumatic events are ongoing in a patient's life, responding if ongoing threats to safety are present, providing brief education about PTSD and psychological treatment and making recommendations for further evaluation and referral.

Special issues related to **screening for sexual trauma** also are addressed, including how to use the right language during the screen, to discern current ongoing danger, and access information on establishing a safety plan and providing assistance.

Finally, recommendations for understanding and **responding to the patient who refuses referral** to mental health are described.

EFFECTIVELY WORKING WITH TRAUMA SURVIVORS

The manual includes brief descriptions of the more common psychotherapeutic and pharmacological **treatments** for PTSD, with some commentary on the empirical evidence base for those treatments.

Information is given about **interpersonal boundary problems** sometimes encountered in working with trauma survivors, which may interfere with an effective patient-provider relationship. Such patients sometimes attempt to draw the clinician into being a friend, a rescuer or a romantic partner. Negative consequences of adopting these roles are described, as well as ways the primary care clinician can prevent harmful boundary crossings and promote better communication and patient care.

Several **aspects of the medical setting that may trigger trauma-related symptoms** are described, including invasive procedures, being touched, experiencing a power differential, being in pain or being in close proximity to a member of the opposite sex. Common avoidance and dissociative reactions of the trauma survivor that may interfere with medical compliance are identified. Ways the clinician can improve compliance and reduce distress to the patient, including understanding potential concerns, engaging in dialogue throughout an exam, planning ahead and respecting patient wishes are covered.



Post-Traumatic Stress Disorder: Implications for Primary Care

vii

A substantial portion of veterans with PTSD have not applied for compensation for service-connected PTSD. Because many veterans with PTSD are more likely to report to primary care than mental health, the primary care provider can have significant impact on the veteran's likelihood of receiving compensation for trauma-related symptoms. The **compensation and pension process** is therefore outlined, with suggestions for assisting the veteran through the process and specific description of compensation and pension issues for sexual assault survivors.

Finally, alternative models and benefits of **behavioral healthcare integration** within the primary care setting are outlined.

COMMONLY ASKED QUESTIONS ABOUT PTSD

We asked a number of primary care practitioners to identify questions about PTSD that they want answered. The questions they raised concerned diverse topics related to such issues as the differentiation of PTSD from other mental health problems, the relationship between PTSD and suicide risk, the distinction between traumatic and other stressors, the nature of traumatic stressors encountered in military life and rates of combat-related PTSD. Other topics included PTSD and aging, malingering, risk factors for PTSD, the nature of PTSD treatment and strategies for supporting the patient with PTSD. Brief answers to these and other questions are provided in the “Commonly Asked Questions about PTSD” section.



Independent Study Outline

Purpose Many veterans with PTSD remain unrecognized and thus may not be receiving the treatment and support they need for this military-related condition. Primary care staff can play a key role in identifying these patients and getting them the help they need. Thus, it is the hope that this endeavor will increase the ability of staff to diagnose, refer to treatment, and provide support and education, as well as have a better understanding and more compassionate appreciation for the needs of veterans who are experiencing this life altering condition.

Objectives Upon completion of this self-study program, participants should be able to:

1. integrate PTSD screening into veterans' assessments;
2. identify the manifestations of PTSD in veterans;
3. describe the current treatment for PTSD;
4. refer veterans with PTSD to appropriate resources;
5. recognize the need to prepare veterans with PTSD for stressful medical procedures;
6. support and encourage identification of veterans with PTSD; and
7. appreciate veterans who have experienced situations that put them at risk for PTSD.

Outcome As a result of this program, clinicians will have a broader base of knowledge with which to provide effective care to patients with PTSD and a better understanding of patients who experience this condition.

Target Audience This independent study is designed for VA Primary Care clinicians.



Post-Traumatic Stress Disorder: Implications for Primary Care

ix

Program Content:

I. INTRODUCTION

- Why Screen Veterans for Traumatic Stress
- Obstacles to Detection of Traumatic Stress-Related Problems
- A Rationale for Routine Traumatic Stress Screening in VA Health Care Settings
- The Role of Health Care Providers

II. BACKGROUND INFORMATION ON TRAUMATIC STRESS

- The Nature and Impact of Traumatic Stress
- Women and Sexual Trauma
- Men and Sexual Trauma

III. GUIDELINES FOR SCREENING FOR TRAUMA-RELATED SYMPTOMS

- Screening and Referral Procedure Overview
- Implementing Screening Procedures

IV. EFFECTIVELY WORKING WITH TRAUMA SURVIVORS

- Treatments for PTSD
- Pharmacotherapy for PTSD
- Medical Compliance/Preparation for Medical Procedures
- The Patient-Provider Relationship: Setting Boundaries
- Special Considerations: The Compensation-Seeking Veteran with PTSD
- Models of Care

V. COMMONLY ASKED QUESTIONS ABOUT PTSD

VI. REFERENCE MATERIALS

Appendix A: Algorithm for the Assessment of Trauma Symptoms in Veterans

Appendix B: Quick Reference Guide

Appendix C: “Understanding Trauma and PTSD” Patient Information Sheet

Appendix D: Screening Tools

Appendix E: Patient Protection and Advocacy



Post-Traumatic Stress Disorder: Implications for Primary Care

x

Appendix F: “Physical health and post-traumatic stress disorder: Review and synthesis”
(Schnurr & Jankowski, 1999)

Appendix G: References

Appendix H: Annotated Bibliography

VII. TESTING AND EVALUATION MATERIALS

Independent Study Test Questions for CME Credit

Independent Study Program Evaluation



Post-Traumatic Stress Disorder: Implications for Primary Care

xi

Program Development

Contributing Authors

Marian I. Butterfield, MD, MPH

Research Career Development Award
Department of Veterans Affairs, Health Services
Research and Development
Assistant Clinical Professor of Psychiatry and
Behavioral Science
Duke University Medical Center
Durham, NC

Eve Carlson, PhD

Research Health Science Specialist
Education and Clinical Laboratory Division
National Center for PTSD
VA Palo Alto Health Care System
Menlo Park, CA

Julian D. Ford, PhD

Assistant Professor
Co-Director, Center for the Study of High Utilizers of
Health Care
Department of Psychiatry
University of Connecticut Health Center
Farmington, CT

Susan Frayne, MD, MPH

Physician – Researcher
VA Boston Healthcare System
Boston, MA
Center for Health Quality, Outcomes and Economic
Research
Bradford, MA

Matthew J. Friedman, MD, PhD

Executive Director
Executive Division
National Center for PTSD
VA Medical Center White River Junction
White River Junction, VT

Jacqueline Garrick, ACSW, CSW, CTS

Deputy Director, Health Care
American Legion
Washington, DC

Gregory A. Leskin, PhD

Clinical Health Science Specialist
Education and Clinical Laboratory Division
National Center for PTSD
VA Palo Alto Health Care System
Palo Alto, CA

Maureen Murdoch, MD, MPH

Physician
Center for Chronic Disease Outcomes Research (An
HSR&D Center of excellence)
VA Medical Center Minneapolis
Minneapolis, MN

Barbara Niles, PhD

Clinical Psychologist
Behavioral Science Division
National Center for PTSD
VA Medical Center Boston
Boston, MA



Post-Traumatic Stress Disorder: Implications for Primary Care

xii

Program Development *continued*

Josef I. Ruzek, PhD

Associate Director for Education
Education and Clinical Laboratory Division
National Center for PTSD
VA Palo Alto Health Care System
Palo Alto, CA

Erica Sharkansky, PhD

Clinical Psychologist
Women's Health Sciences Division
National Center for PTSD
VA Boston Healthcare System
Boston, MA

Patricia Watson, PhD

Deputy for Education and Clinical Networking
Executive Division
National Center for PTSD
VA Medical Center White River Junction
White River Junction, VT

Julia Whealin, PhD

Clinical Psychologist
Pacific Islands Division
National Center for PTSD
VA Honolulu Healthcare System
Honolulu, HI

Program Development and Planning Committee

Robert Albanese, MD

Staff Physician
VA Medical Center Charleston
Charleston, SC

Donna Burnett

Project Support Assistant
Birmingham Employee Education Resource Center
Birmingham, AL

Bradford Felker, MD

Physician
VA Puget Sound Health Care System
Seattle, WA

John Fotiades, MD

Physician
VA Medical Center Bronx
Bronx, NY

Susan Frayne, MD, MPH

Physician – Researcher
VA Boston Healthcare System
Boston, MA
Center for Health Quality, Outcomes and Economic
Research
Bradford, MA

Jacqueline Garrick, ACSW, CSW, CTS

Deputy Director, Health Care
American Legion
Washington, DC

Robert Gibbs, MD

ACOS/Primary Care
VA Medical Center Muskogee
Muskogee, OK

Pam Hebert, Dr. PH

Project Manager
Birmingham Employee Education Resource Center
Birmingham, AL



Post-Traumatic Stress Disorder: Implications for Primary Care

xiii

Program Development *continued*

Gregory A. Leskin, PhD

Clinical Health Science Specialist
Education and Clinical Laboratory Division
National Center for PTSD
VA Palo Alto Health Care System
Palo Alto, CA

Maureen Murdoch, MD, MPH

Physician
Center for Chronic Disease Outcomes Research (An
HSR&D Center of excellence)
VA Medical Center Minneapolis
Minneapolis, MN

Josef I. Ruzek, PhD (Co-Chair)

Associate Director for Education
Education and Clinical Laboratory Division
National Center for PTSD
VA Palo Alto Health Care System
Palo Alto, CA

Erica Sharkansky, PhD

Clinical Psychologist
Women's Health Sciences Division
National Center for PTSD
VA Boston Healthcare System
Boston, MA

Amy Smith, RN, MSN, CFNP

Nurse Practitioner-Primary Care
Department of Veterans Affairs
Jackson, MS

Patricia Watson, PhD (Co-Chair)

Deputy for Education and Clinical Networking
Executive Division
National Center for PTSD
VA Medical Center White River Junction
White River Junction, VT

Program Director

Pamela Hebert, Dr. PH

Birmingham Employee Education Resource Center
Birmingham, AL

Program Support Assistant

Donna Burnett

Birmingham Employee Education Resource Center
Birmingham, AL

Graphics and Media Development

R. John Brix, BFA

Visual Information Specialist
Minneapolis Employee Education Resource Center
Minneapolis, MN

Jeffery L. Henry

Media Producer
Employee Education System
VA Medical Center North Chicago
North Chicago, IL

Cover Photograph Provided by:

United States Department of Defense
Photo enhancement and colorization by R. John Brix



Post-Traumatic Stress Disorder: Implications for Primary Care

1

1 WHY SCREEN VETERANS FOR TRAUMATIC STRESS

Mary B. is a 57-year-old retired nurse. She is currently a patient in the women's clinic. Her recent pap smear showed dysplastic cells. Today, she is seeing the GYN specialist from the university for further diagnostic procedures. Upon walking into the exam room, you notice she is sitting at attention in the chair as far away from the exam table as possible. She asks if you could re-schedule her appointment for another day. She says "I just don't think I can do this today. It took all I could do to get the first exam done."

You are concerned about delaying the test because of the medical urgency and difficulty in scheduling the visit in the near future.

What would you do?

Screening veterans for traumatic stress is important because:

1. trauma is common.
2. trauma often leads to PTSD and other impairment.
3. trauma often presents to primary care, but goes unrecognized.
4. failure to identify and treat PTSD has adverse effects on physical and mental health.

Trauma is Common

Approximately 85% of male veterans have been exposed to traumatic events (Hankin, Spiro, Miller, & Kazis, 1999). Fifty-two percent of World War II veterans and 35% of veterans of the Korean conflict have been exposed to combat. Women veterans also may have been exposed to combat, and 23% of women veterans using VA care report that they were sexually assaulted while in the military (Skinner, Kressin, Frayne, Tripp, Hankin, Miller, & Sullivan, 2000).

More than half of all male Vietnam veterans and almost half of all female Vietnam veterans – About 1,700,000 Vietnam veterans in all – have experienced “clinically serious stress reaction symptoms.”



Post-Traumatic Stress Disorder: Implications for Primary Care

2

Up to 90% of the general population in the United States is exposed to a traumatic stressor at some time (Breslau, Kessler, Chilcoat, Schultz, Davis, & Andreski, 1998). Common types of trauma include road traffic accidents, man-made or natural disasters, wartime combat, interpersonal violence (e.g., child abuse, sexual assault, domestic violence or other criminal violence), life-threatening medical conditions and sudden, unexpected death of a close relative or friend.

Patients with PTSD experience a significant degree of functional impairment, similar to that observed in patients suffering from major depression or chronic physical diseases, such as diabetes and congestive heart failure.

Trauma Often Leads to PTSD and Other Impairment

- The percentage of those exposed to traumatic stressors who then develop post-traumatic stress disorder (PTSD) can vary depending on the nature of the trauma. In one major U.S. epidemiological study (Kessler et al., 1995), lifetime prevalence rates of PTSD following specific types of trauma were:

	<u>Men</u>	<u>Women</u>
combat	38%	
rape	65%	46%
life-threatening accident	6%	9%
physical attack	2%	21%

- About one in 12 adults experiences PTSD at some time during their lifetime (women = 10.4%; men = 5%; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Women are twice as likely as men to develop PTSD following exposure to traumatic events.
- Among American Vietnam theater veterans, 31% of men and 27% of women are estimated to meet criteria for PTSD at some point in their lives. An additional 22.5% of male and 21.2% of female veterans have had partial PTSD at some point. This means that more than half of all male and almost half of all female Vietnam veterans – about 1,700,000 Vietnam veterans in all – have experienced “clinically serious stress reaction symptoms” (Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar, & Weiss, 1990).
- Life-threatening medical conditions such as myocardial infarction, severe burns, severe injuries and cancer can cause or exacerbate PTSD.



Post-Traumatic Stress Disorder: Implications for Primary Care

3

- 20% of VA ambulatory care outpatients screen positive for PTSD (Hankin et al., 1999); this is higher than the rate seen in private sector patients.
- A VA ambulatory care outpatient who has been exposed to trauma is three times more likely to be diagnosed with depression and two times more likely to be diagnosed with an alcohol disorder.
- Patients with PTSD experience a significant degree of functional impairment (Stein, McQuaid, Pedrelli, Lenox, & McCahill, 2000) similar to that observed in patients suffering from major depression.
- Primary care patients with untreated anxiety report levels of functioning within those ranges expected for patients with chronic physical diseases, such as diabetes and congestive heart failure (Fifer, Mathias, Patrick, Mazonson, Lubeck, & Buesching, 1999).
- PTSD is associated with significant problems in living, including alcohol abuse, marital problems, unemployment and suicide, with high levels of use of medical services.
- Traumatic experiences and traumatic stress bring about hormonal, neurochemical, immune functioning and autonomic nervous system changes which can affect physical health.

PTSD Often Presents in Primary Care, but Goes Unrecognized

- In the private sector, nearly half of all patient visits for a mental health disorder are to a medical clinic or provider. Of those visits, 90% are to primary care providers.
- Despite its prevalence, PTSD is likely to remain unrecognized and untreated in primary care patients. Few medical clinics systematically identify trauma survivors with related mental health problems.

Failure to Identify and Treat PTSD has Adverse Effects on Physical and Mental Health

- Traumatic stress is associated with increased health complaints, health services utilization, morbidity and mortality (Schnurr & Jankowski, 1999; Schnurr, Friedman, Sengupta, Jankowski, & Holmes, 2000).
- Untreated PTSD can impair recovery from medical conditions.
- In failing to address the impact of traumatic stress on health, patient and doctor become less likely to achieve desired outcomes.



2 OBSTACLES TO DETECTION OF TRAUMATIC STRESS-RELATED PROBLEMS

“Although screening for PTSD does take a little time, it is time well spent. I will never forget my first experience screening a patient specifically for PTSD. The patient seemed depressed and upon discussion with the patient, it became clear that the patient had suffered from PTSD for nearly 30 years. I referred him to the Trauma Recovery Program where he was treated with care and compassion. What a difference this made in the lives of the patient and his family. The patient and his family still sing my praises for this. Of course, this opened my eyes to the real need to screen my patients for PTSD and since that time, I have seen many positive results of PTSD screening and treatment.”

What are the obstacles to routine and active identification of veteran patients with a history of trauma exposure and symptoms of PTSD?

Lack of Awareness

Awareness of the impact of trauma exposure and PTSD on health is very new (see Appendix F for a state-of-the-art review of this topic). It is not a familiar issue to many health care providers. In fact, the diagnosis of PTSD is itself relatively new to the psychiatric nomenclature.

Lack of Time

In all primary care settings, time is of the essence. In a world with cost constraints on health care, there is less and less time to chat with the patient and little time to consider issues that do not appear to be directly related to presenting health complaints.

Lack of Assessment Tools

Until recently, the lack of a time-efficient and cost-efficient screening method to identify patients with post-traumatic stress symptoms was an obstacle to screening.

Provider Attitudes that Impede Detection

It is hard to bring up the subject of trauma, and most health care providers have little experience in doing so. Moreover, providers may have a variety of concerns about asking about traumatic experiences and symptoms.



Post-Traumatic Stress Disorder: Implications for Primary Care

5

Concern	Consider
“It’s upsetting to the patient.”	It may be upsetting to the patient not to talk.
“It’ll re-traumatize the patient.”	Talking about trauma is not the same thing as experiencing a traumatic event.
“It won’t do any good.”	It may be perceived as caring or helpful by the patient and may lead to definitive treatment.
“I don’t know what to do about it.”	It may be helpful just to raise the subject and offer a referral.
“It’ll embarrass us both.”	Physicians and nurses routinely take on subjects that are potentially embarrassing, such as screening for substance abuse, sexual dysfunction or suicidality.
“It will offend him or her.”	Most trauma survivors will not be offended, and may instead feel relieved that they can talk about it.
“It’s not my role to ask about trauma history.”	It is the role of the health care provider to work to improve health, and trauma/PTSD affects physical and mental health.
“I don’t have the time.”	Raising this issue takes little time and may save valuable clinical time in the long run.
“It has little to do with health concerns.”	Trauma has documented associations with a host of physical health problems and health services utilization.

Patient Attitudes that Impede Detection

Like the professional helper, the veteran also may have a host of reasons for avoiding discussion of past (or recent) trauma. One very important reason is that patients fear that reminders of the trauma will cause distress, fear, anger or shame; they are, therefore, motivated to avoid reminders, including talking about the trauma. It is not unusual to hear from a veteran that he or she has never disclosed what happened to anyone. In addition, it is often the case that the person does not know about post-traumatic stress disorder, its causes



Post-Traumatic Stress Disorder: Implications for Primary Care

6

and symptoms. It also is probable that the link between health concerns and emotional problems is not clear to the patient. Skepticism regarding benefits of sharing a trauma story are particularly widespread. The following kinds of fears of disclosure and its effects are common:

- “This person can’t help me anyway.”
- “It doesn’t have anything to do with my health.”
- “If I talk about it, I’ll become upset/angry/hysterical.”
- “This person doesn’t want to hear about it; it will upset the doctor.”
- “It’s too private/shameful to tell.”

Despite these patient concerns, it is important to note that most previously traumatized patients do not object to being queried about their trauma history. In one study, a majority of female patients agreed that physicians should routinely ask about histories of trauma.

As primary care practitioners become more familiar with the ways in which they can help patients with education and referral regarding trauma, many of the patient concerns listed above can be acknowledged and addressed.



Post-Traumatic Stress Disorder: Implications for Primary Care

7

3 A RATIONALE FOR ROUTINE TRAUMATIC STRESS SCREENING IN VA HEALTH CARE SETTINGS

“I have had an 83-year-old patient in whom I suspected depression and PTSD. When I screened him, he began to cry and tell me that since WWII he had these problems but was scared to ask anyone about it because he thought they would think he was crazy. Since screening, he was referred for treatment and is much better. He suffered for 40 years! We must not continue to let our patients suffer in silence. We have an obligation to screen for this treatable illness. Who better to screen the patient than the primary care provider with whom they have a long term, therapeutic and hopefully trusting relationship?”

While treatment-seeking patients do not typically disclose personal trauma histories spontaneously, they usually will provide this information if queried directly.

Currently, most VA and non-VA medical professionals do not routinely screen for trauma history or PTSD (war-related or otherwise), so the majority of trauma survivors with problems go undetected. In a study conducted in the civilian sector, only 6% of adult female patients at a Family Medicine Clinic reported being asked by physicians about their trauma histories (Walker, Torkelson, Katon, & Koss, 1993). In another study, 83% of women whose emergency room visits were prompted by partner abuse were not asked about domestic violence and did not spontaneously disclose the abuse to emergency room personnel (Abbott, Johnson, Koziol-McLain, & Lowenstein, 1995). Even in trauma medicine, where injuries and illnesses are recognized as life-threatening and traumatic, the emotional consequences of such medical events are not routinely identified or addressed.

Brief, direct questions about trauma exposure and post-trauma symptoms included as a routine part of contact can quickly identify many veterans whose traumatic experiences are continuing to have a significant impact on their functioning. An efficient way to accomplish this is to include questions about post-trauma symptoms and/or trauma exposure in the pencil-and-paper self-report forms that patients complete as a review of their health habits or medical symptoms prior to seeing their health care practitioner (see Appendix D for screening tools). Use of screening questionnaires is important because face-to-face interview screening places demands on staff resources that may not be acceptable.



Post-Traumatic Stress Disorder: Implications for Primary Care

While treatment-seeking patients do not typically disclose personal trauma histories spontaneously, they usually will provide this information if queried directly. In a study of 50 emergency room charts selected at random, references to sexual abuse were found in only 6% of the charts. Subsequently, physicians were instructed to routinely ask patients about histories of childhood sexual abuse. Among 50 women directly queried, 70% reported having been sexually molested (Briere & Zaidi, 1989). **Screening leads to increased detection.**

Research suggests that most previously traumatized patients do not object to being queried about their trauma history in a primary care setting.

In summary, PTSD symptom screening is an important addition to routine preventive health screening in VA primary health care settings because:

- patients are unlikely to report trauma history or symptoms unless directly asked.
- trauma exposure and PTSD are associated with many problems – emotional and physical – that affect health.
- in veteran patients with long lasting PTSD, significant improvements in symptoms are unlikely to occur without treatment.

Screening for PTSD should be a regular occurrence in the primary care setting, as symptoms are cyclical for some individuals and may be “triggered” by events such as personal trauma anniversaries (e.g., anniversary of Khe Sanh) or news in the media (e.g., peacekeeping mission coverage; “Saving Private Ryan”). For this reason, all new patients should be routinely screened, with screening on an annual or semi-annual basis thereafter.



Post-Traumatic Stress Disorder: Implications for Primary Care

4 THE ROLE OF HEALTH CARE PROVIDERS

Health care providers in primary care settings can play an important role in identifying traumatized veterans and helping them get treatment. Some of the things health care providers can do include:

- conducting (or having mental health specialists conduct) brief screening for PTSD symptoms.
- providing on-site, trauma-related patient and family education materials (see Appendix C).
- providing referral for specialized PTSD evaluation and treatment for patients with trauma-related problems.
- educating staff about identification and referral of veterans with trauma-related problems.
- using understanding of trauma and its effects to inform treatment planning for patients whose severe psychological complications interfere with medical care.
- contributing to the development of genuinely multidisciplinary teams that ensure integration and continuity of patient care.

Often the “difficult” or “impossible” patient is persistently confused, angry, depressed, caught up in abuse of alcohol or drugs or otherwise emotionally dependent and demanding because she or he has not fully recovered from trauma.

Note: In this guide, we do not emphasize the diagnosis of PTSD. That is beyond the scope of the typical primary care provider. Rather, we encourage providers to take steps to detect post-traumatic stress symptoms and to refer patients for further evaluation by mental health personnel.

We recommend that, whenever possible, primary care providers develop ongoing collaborative relationships with mental health professionals and establish screening and intervention procedures for their patients with problems related to traumatic experiences.

Primary care providers may elect to treat some symptoms of PTSD with medications. However, many patients with PTSD will benefit from mental health referral for evaluation and treatment, in addition to any pharmacotherapy that is indicated. There is wide avail-



Post-Traumatic Stress Disorder: Implications for Primary Care

ability of mental health services within the VA Health Care System, and referral for mental health assistance can:

- enable the survivor to prevent trauma from continuing (e.g., by interrupting ongoing domestic violence),
- reduce trauma-related distress and hasten the survivor's emotional recovery, and
- reduce stress-related medical problems and increase the survivor's adherence to and benefit from medical care.

A very useful resource for primary care practitioners is Module P of the Major Depressive Disorder Clinical Practice Guidelines, which addresses assessment and treatment of PTSD co-occurring with Major Depressive Disorder. The guidelines are available on the web at <http://www.va.gov/HEALTH/mdd.hlp>.

When veterans and their family members begin to understand that much of their distress and many of their problems are connected with their war (or other traumatic) experiences and post-traumatic stress, they often are willing to reach out for many kinds of help that are available. Often the “difficult” or “impossible” patient is persistently confused, angry, depressed, caught up in abuse of alcohol or drugs or otherwise emotionally dependent and demanding because she or he has not recovered from trauma. These medical management problems can lead to physical deterioration despite excellent care and a thorough mental health examination is essential to find the best approaches to intervention.



5 THE NATURE AND IMPACT OF TRAUMATIC STRESS

The Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV; 1994, p. 424) specifies criteria for the diagnosis of post-traumatic stress disorder. These include:

- exposure to a traumatic event that involved actual or threatened death or injury (to self or others) or a threat to physical integrity,
- the person's response to the traumatic life event must have involved intense fear, helplessness, or horror,
- persistent re-experiencing of the event (criteria specify that the person must have one or more of the re-experiencing symptoms; see below),
- persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (three or more avoidance symptoms; see below),
- two or more persistent symptoms of arousal (see below),
- duration of symptoms must last more than one month, and
- symptoms must cause clinically significant distress or impaired functioning.

As noted above, we do not emphasize the diagnosis of PTSD. That is beyond the scope of the typical primary care provider. Rather, we encourage providers to take steps to detect post-traumatic stress symptoms and to refer patients for further evaluation by mental health personnel.

Rates of PTSD will be higher if trauma exposure has been more severe. For example, between 30 and 70% of POWs will have chronic PTSD.

Traumatic Events and PTSD

Many experiences in combat may be potentially traumatic. Veterans involved in firefights and their aftermath will have been exposed to injury, personal life threat, death and dying, mass death, sights of mutilated bodies and/or atrocities. Those who provided medical care in the field (e.g., nurses) may have experienced many of these same traumas. Prisoners of war (POWs) also will have experienced many such events (e.g., torture, starvation) during



Post-Traumatic Stress Disorder: Implications for Primary Care

their captivity. Some veterans have been sexually assaulted in the war zone or during other military service.

At the time of a traumatic event, many people feel overwhelmed with fear, while other people feel numb or disconnected. Most trauma survivors will be upset for several weeks following an event, but recover to a variable degree without treatment. The percentage of trauma victims that will continue to have problems and develop post-traumatic stress disorder (PTSD) will depend upon many factors, including the severity of trauma exposure. As noted above, one major epidemiological study of American civilians aged 15-54 (National Comorbidity Survey, Kessler et al., 1995) indicated lifetime prevalence rates of PTSD following specific types of trauma:

	<u>Men</u>	<u>Women</u>
combat	38%	
rape	65%	46%
life-threatening accident	6%	9%
physical attack	2%	21%
witnessing death or injury	6%	8%
natural disaster	4%	5%

Diagnostic Criteria for PTSD

Post-traumatic stress disorder (PTSD) is a mental disorder resulting from exposure to an extreme traumatic stressor. PTSD has a number of unique defining features and diagnostic criteria, as published in DSM-IV. These Criteria include:

- Criterion A – Exposure to a traumatic stressor
- Criterion B – Re-experiencing symptoms
- Criterion C – Avoidance and numbing symptoms
- Criterion D – Symptoms of increased arousal
- Criterion E – Duration of at least one month
- Criterion F – Significant distress or impairment of functioning



Post-Traumatic Stress Disorder: Implications for Primary Care

13

Criterion A: Exposure to a traumatic stressor

- A traumatic event involves actual or threatened death or injury to oneself or to others.
- Response to the trauma involves intense fear, helplessness or horror.

For Criterion A to be met, the person must have been exposed to a traumatic event in which both of the following were present: (1) the person experienced, witnessed or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others; and (2) the person's response to the trauma involved intense fear, helplessness or horror. (In children, this may be expressed instead by disorganized or agitated behavior.)

Stressful events of daily life that do not meet these criteria include divorce and financial crisis, which may lead to adjustment problems, but are not sufficient to meet Criterion A for PTSD.

According to the DSM-IV, the witnessing of and learning about stressors experienced by others can be sufficient to induce PTSD. Common examples include witnessing or learning about the sudden death of a loved one, or observing serious injury or unnatural death of another person. The more distant the individual is to the traumatic event, such as learning about the death/injury of another person, the less likely one usually is to develop PTSD symptoms or have protracted or severe emotional disturbance.

Qualifying stressors must induce an intense emotional response. According to DSM-IV, a qualifying stressor must not only be threatening, but it also must induce a response involving intense fear, helplessness or horror. Some severely traumatized individuals may dissociate during a stressor or have a blunted response due to defensive avoidance and numbing. Often, the intense emotional response to the stressor may not occur until considerable time has elapsed after the incident has terminated.

Criterion B: Re-experiencing symptoms

Criterion B symptoms of PTSD involve persistent and distressing re-experiencing of the traumatic event in one or more of the following ways:

- recurrent and intrusive distressing recollections of the event, including images, thoughts or perceptions.
- recurrent distressing dreams of the event.
- acting or feeling as if the traumatic event were recurring, such as a sense of reliving the experience, illusions, hallucinations and dissociative flashback episodes, including those which occur on awakening or when intoxicated.



Post-Traumatic Stress Disorder: Implications for Primary Care

14

- intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect to the traumatic event.
- physiological reactivity upon exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

In these symptoms, the trauma comes back to the PTSD sufferer in some way, through memories, dreams or distress in response to reminders of the trauma. PTSD is distinguished from “normal” remembering of past events by the fact that re-experiencing memories of the trauma(s) are unwanted, occur involuntarily, elicit distressing emotions and disrupt the functioning and quality of life of the individual.

Criterion C: Avoidance and numbing symptoms

Criterion C symptoms of PTSD involve persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness, as evident by three or more of the following symptoms that were not present before the trauma:

- efforts to avoid thoughts, feelings or conversations associated with the trauma.
- efforts to avoid activities, places or people that arouse recollections of the trauma.
- inability to recall an important aspect of the trauma.
- markedly diminished interest or participation in significant activities.
- feelings of detachment or estrangement from others.
- restricted range of affect (e.g., unable to have loving feelings).
- sense of foreshortened future, where the interviewee does not expect to have a career, marriage, children or a normal life span.

Criterion C symptoms involve avoiding reminders of the trauma. These reminders can be internal cues, such as thoughts or feelings about the trauma, and/or external stimuli in the environment that spark unpleasant memories and feelings. To this limited extent, PTSD is not unlike a phobia, where the individual goes to considerable length to avoid stimuli that provoke emotional distress. Criterion C symptoms also involve more general symptoms of impairment, such as pervasive emotional numbness, feeling “out of sync” with others or expecting to be deprived of attaining normal developmental goals due to their trauma experiences.



Post-Traumatic Stress Disorder: Implications for Primary Care

15

Criterion D: Symptoms of increased arousal

Criterion D is represented by persistent symptoms of increased arousal not present before the trauma. For this cluster of symptoms to be positively endorsed, the patient must experience at least two of the five following symptoms:

- difficulty falling or staying asleep
- irritability or outbursts of anger
- difficulty concentrating
- hypervigilance
- exaggerated startle response

Individuals suffering from PTSD experience heightened physiological activation, which may occur in a general way, even while at rest. More typically, this activation is evident as excessive reaction to specific stressors that are directly or symbolically reminiscent of the trauma. Criterion D symptoms are often, but not always, linked to reliving the traumatic event. For example, sleep disturbance may be caused by nightmares, intrusive memories may interfere with concentration and excessive watchfulness may reflect concerns about preventing recurrence of a traumatic event that may be similar to that previously endured.

Criterion E: Required duration of symptoms

For a diagnosis of PTSD to be made, **the symptoms must endure for at least one month.**

Criterion F: PTSD symptoms must be clinically significant

Criterion F requires that PTSD symptoms cause clinically significant distress or impairment in social, occupational or other important areas of functioning. Some individuals may experience a great deal of subjective discomfort and suffering owing to their PTSD symptoms, without conspicuous impairment in their day-to-day functional status. Other individuals show clear impairment in one or more spheres of functioning, such as social relating, work efficiency or ability to engage in and enjoy recreational or leisure activities.



Post-Traumatic Stress Disorder: Implications for Primary Care

16

Associated Problems

In addition to PTSD, individuals with history of trauma are at heightened risk for developing other problems, including:

- depression
- substance abuse
- obsessive-compulsive disorder
- suicidal ideation
- sexual dysfunction
- eating disorders
- homelessness
- revictimization (increased risk of subsequent exposure to trauma)

Complex PTSD

Clinicians and researchers have found that the current PTSD diagnosis often does not capture the severe psychological harm that occurs with such prolonged, repeated trauma (e.g., concentration camp and prisoner of war experiences, domestic violence or child abuse). For example, an ordinary, healthy person can experience changes in their self-concept and the way they adapt to stressful events. The term “**complex PTSD**,” has been coined to define the symptoms unique to long-term trauma, including:

- **alterations in emotional regulation**, which may include symptoms such as persistent sadness, suicidal thoughts, explosive anger or inhibited anger.
- **alterations in consciousness**, such as forgetting traumatic events, reliving traumatic events or having episodes in which one feels detached from one’s mental processes or body.
- **alterations in self-perception**, which may include a sense of helplessness, shame, guilt or stigma, as well as a sense of feeling different from other human beings.
- **alterations in perception of perpetrator**, such as attributing total power to the perpetrator or becoming preoccupied with the relationship to the perpetrator, including preoccupation with revenge.
- **alterations in relations with others**, including isolation, distrust or repeated search for a rescuer.
- **alterations in system of meanings**, which may include a loss of sustaining faith or a sense of hopelessness and despair.



Post-Traumatic Stress Disorder: Implications for Primary Care

Acute Traumatic Stress Reactions

A small but not insignificant number of patients with primary health care appointments have recently suffered a life-threatening event or some other sudden, uncontrollable and frightening experience such as sexual assault, motor vehicle accident, fire, natural or man-made disaster or domestic violence. Receiving a serious, life-threatening diagnosis (e.g., cancer or HIV) also can lead to acute stress reactions. Acute trauma reactions, while expected, introduce many complications into medical treatment, including: specific somatic problems (headache, stomach pain) due to severe stress reactions, diffuse somatic reactions (dizziness, decreased appetite) due to emotional distress, difficulties with following regimens and attending appointments due to stress, confusion and feeling overwhelmed. For some trauma survivors, acute stress reactions are severe enough to meet criteria for Acute Stress Disorder (ASD). In addition to symptoms of re-experiencing, avoidance and arousal, individuals with ASD show multiple symptoms of dissociation (e.g., subjective sense of numbing, reduced awareness of surroundings or depersonalization). To be diagnosed with ASD, specific exposure, symptom and functional impairment criteria must be met, and the disturbance must occur within four weeks of the trauma and last for a minimum of two days and a maximum of four weeks.

PTSD: The Veteran Experience

Most veterans who are suffering with PTSD face many problems. They may have difficulty controlling their trauma memories and related intense emotions of fear, sadness or anger. They may feel unsafe in a dangerous world and remain “on guard” for possible threats in the environment around them. Many are emotionally numb, seldom experience positive emotions such as love or happiness, or report an inability to feel sadness or to cry, even in situations such as the death of a family member. Many veterans with PTSD have never talked about the upsetting aspects of their war experiences with family or friends. Many, especially those whose traumatic (childhood or adult) experiences have involved exposure to human cruelty or perceived abuse of authority, have difficulty trusting others (including the primary care practitioner). Irritability and anger are symptoms of PTSD, and many veterans react to ordinary disagreements or arguments with intense anger, out of proportion to the issue at hand. Left unresolved, all of the above symptoms may decrease medical compliance, impede provider – patient communication and increase health care utilization.

Many veterans with PTSD have never talked about the upsetting aspects of their war experiences with family or friends.



Post-Traumatic Stress Disorder: Implications for Primary Care

Veterans of World War II and Korea

Veterans of World War II and the Korean Conflict are less likely to have sought help for PTSD than Vietnam veterans. Many have experienced the symptoms of PTSD for years, but have coped through “workaholism” and/or alcohol use. Some older veterans are skeptical about the concept of PTSD and are sensitive to perceived stigma associated with mental illness; they also may be likely to minimize their traumatic experiences and emotional distress. Aging veterans face a variety of situations – health problems, bereavement and retirement – that may activate or worsen PTSD symptoms. Illness and death are reminders of previous danger in war; exposure to the death of significant others is a direct reminder of war zone grief. These problems bring up feelings of vulnerability, loss of control, dependency on others and helplessness; important themes for those struggling with PTSD. Moreover, when veterans retire, they lose an important avoidance strategy that may have reduced the frequency or intensity of PTSD symptoms.

Aging veterans face a variety of situations – health problems, bereavement and retirement – that may activate or worsen PTSD symptoms.

Vietnam Veterans

Vietnam veterans frequently describe exposure not only to firefights, death and dying, but also to brutality, mutilated bodies, the death of children and the loss of a friend. Distrust of authority (including medical professionals) and anger towards the government are common. Sometimes, these feelings have not been helped by previous experiences with VA health care services; in the past, when seeking help at the VA, they may have found their PTSD symptoms and their right to compensation for psychological problems questioned. Upon their return from Vietnam, many veterans felt rejected or betrayed by the American public, making readjustment to civilian life more difficult. Often, due to anger and anxiety, their work life has been characterized by holding one job after another, leaving many with a general sense of failure. Greater levels of alienation from civilian society, trauma-related guilt and problems in maintaining employment all have contributed to the relatively greater social isolation seen in veterans of Vietnam.



Post-Traumatic Stress Disorder: Implications for Primary Care

19

Greater levels of alienation from civilian society, trauma-related guilt and problems in maintaining employment all have contributed to the relatively greater social isolation seen in veterans of Vietnam.

Veterans of More Recent Deployments

In recent years, there have been military deployments encompassing war (e.g., Operation Desert Storm), peacekeeping (e.g., Haiti, Bosnia, Kosovo) and peace enforcement (e.g., Somalia). Generally, younger veterans have had relatively low rates of utilization of PTSD and services in the VA. However, among Gulf War veterans seeking health-related care, PTSD is one of the most commonly diagnosed medical conditions. Compared with military personnel not deployed to the Persian Gulf, those who participated in the war show higher rates of PTSD (8% two years after the war), although absolute levels of PTSD appear lower than in previous wars. Despite limited American casualties, the conflict did include “pockets of trauma” in which such events as intense combat and death by friendly fire occurred. Some veterans found themselves exposed to high levels of trauma by nature of their job assignments. For example, those assigned graves registration duties have high rates of PTSD (48% have current PTSD, 65% have lifetime PTSD).

Other men and women were sexually assaulted during military service. Studies of Gulf War veterans suggest that clinicians need to attend to many of the same issues so prominent in Vietnam veterans with PTSD, including the prevention of job turnover, the management of anniversary reactions (e.g., an exacerbation of PTSD occurring on the anniversary of the traumatic event), and the management of worry and anger over having been exposed to environmental toxins. Increased health symptom reporting is unlikely to be exclusively psychogenic in origin; it has been associated with exposure to environmental pesticides, debris from Scud missiles, chemical and biological warfare agents and smoke from tent heaters, after controlling for war zone exposure and PTSD.

Despite limited American casualties, the Gulf War did include “pockets of trauma” in which such events as intense combat and death by friendly fire occurred.

The stresses encountered on peacekeeping missions may differ somewhat from combat stressors, yet studies of veterans serving in these non-traditional military roles indicate that experiences associated with peacemaking or peacekeeping also can cause PTSD and/or



Post-Traumatic Stress Disorder: Implications for Primary Care

high levels of general psychological distress. For example, 8% of Somalia peacekeepers met criteria for PTSD five months after their return to the United States and over one-third met criteria for general “psychiatric caseness.” This kind of humanitarian mission can involve, in addition to conventional military dangers, exposure to extreme climates, mass suffering and death, body-handling, violent confrontations with locals, and an inability to prevent harm to starving, impoverished civilians. In the latter situations, personnel may be required to witness violence without being able to intervene. In a study of Somali peacekeepers, severity of PTSD (in both men and women) was related not only to exposure to combat, but also by exposure to the dying of the Somali people and to sexual harassment.

PTSD and Relationships

Because the symptoms of PTSD and other trauma reactions change how a trauma survivor feels and acts, traumatic experiences that happen to one member of a family can have an effect on everyone else in the family. Trauma symptoms can make a family member hard to get along with or cause them to withdraw from the rest of the family. It can be very hard to deal with these kinds of changes in a loved one, and **the primary care practitioner may see similar trauma-related behaviors in both trauma survivors and in family members or caretakers.** All of the reactions described below are common in families following trauma:

- living with an individual who has PTSD does not automatically cause PTSD; but it can produce “**vicarious**” or “**secondary**” **traumatization**, which can range from mild to severe, almost like having PTSD.
- significant others may feel **pressured, tense and controlled** as a result of living with trauma survivors who feel irritable, on-guard, easily startled, worried or anxious.
- trauma symptoms greatly interfere with survivors’ abilities to concentrate, listen carefully and make cooperative decisions – so problems often go unresolved for a long time, and significant others may come to **feel that dialogue and teamwork are impossible.**
- sympathy for a trauma survivor can lead to a habit of “babying” a trauma survivor and having **low expectations** for him or her.
- **depression** also is common among family members when the way a traumatized person acts causes feelings of pain or loss.
- family members can become **fearful** knowing that something terrible can happen “out of the blue,” or as a result of the trauma survivor being worried about safety, being very angry and aggressive or having nightmares or flashbacks.



Post-Traumatic Stress Disorder: Implications for Primary Care

21

- family members also may want to **avoid** talking about the trauma or trauma-related problems, because they just do not want to think about their problems or they want to spare the trauma survivor or they are afraid of his or her reaction.
- family members can feel **guilty or shameful** when they feel responsible for the trauma, the trauma survivor's happiness or general well-being, or for being unsupportive when they didn't realize why their loved one was having so many problems.
- family members may feel **angry** about how the trauma and its effects have caused such problems in their lives, or at whomever they believe is responsible for the traumatic event. They may be angry in reaction to the trauma survivor's anger and irritability or feel that the survivor should just "forget about it" and get on with life.
- family members also may have very **negative feelings** because of new behaviors that developed following a trauma, even when they know that it is unfair to their loved one.
- **drug and alcohol abuse** can become problems when loved ones try to escape from the bad feelings caused by family problems or to keep the trauma survivor "company" when they are using drugs or alcohol to avoid trauma-related feelings.
- difficulty falling or staying asleep and severe nightmares prevent both the survivor and partner from sleeping restfully and may make **sleeping together difficult**.
- when family members develop bad health habits or constantly feel anxious, worried, angry or depressed, they are more likely to develop stomach problems, bowel problems, headaches, muscle pain and other **health problems**.

PTSD and Health

The specific health problems associated with PTSD are varied and suggest multiple etiologies; neurobiological, psychological and behavioral factors are likely explanations. Research has increasingly demonstrated that PTSD can lead to neurobiological dysregulation, altering the functioning of catecholamine, hypothalamic-pituitary-adrenocorticoid, endogenous opioid, thyroid, immune and neurotransmitter systems. It is not surprising, therefore, that exposure to traumatic stress is associated with increased health complaints, health services utilization, morbidity and mortality. PTSD appears to be a key mechanism that accounts for the association between trauma and poor health. Many individuals with PTSD have substance use (alcohol and drug use) co-morbidities for which the primary care provider is well poised to intervene. For instance, 60% of veterans with PTSD smoke cigarettes; PTSD and exposure to traumatic experiences are associated with a variety of health-threatening behaviors, such as alcohol or drug abuse, risky sexual practices, suicide



Post-Traumatic Stress Disorder: Implications for Primary Care

22

and other seemingly self-destructive behaviors. Risks of infectious diseases are high in PTSD cohorts, including HIV and Hepatitis B&C, as well as sexually-transmitted diseases. More information about the relationship between PTSD and health is provided in Appendix F: Schnurr & Jankowski, 1999, “Physical Health and Post-Traumatic Stress Disorder: Review and Synthesis.”

The specific health problems associated with PTSD are varied and suggest multiple etiologies; neurobiological, psychological and behavioral factors are likely explanations.

“Mr. John A. is a 78-year-old WW II veteran. He comes to the primary clinic with multiple complaints that seem to have no explainable cause. Often, he says, ‘nobody can help me.’ He jumps when you touch him and you must continually tell him what comes next in the exam, as he is very sensitive to environmental conditions. He claims to have a history of alcohol abuse, but now just ‘smokes.’ He sometimes has trouble following directions and can get upset when he cannot concentrate.

He has a current history of hypertension, diabetes, degenerative joint disease, emphysema and coronary artery disease. You have tried repeatedly to get him to quit smoking, since this makes his emphysema worse.

During his last visit, you ask him about his smoking and he tells you he believes he has been exposed to poison while he was fighting in the Battle of the Bulge in the Argonne forest and that he thinks that may be the reason he has trouble breathing and concentrating. He says, ‘I have never been the same since then.’

You ask him to tell you more and he says, ‘Ever since that time when all those shells were exploding around me and the tanks were filling the air with all that diesel and mustard gas, I get hard breath and shaky. And some nights when I dream about it, I even sweat too and can’t go back to sleep. That is when I smoke more than normal and sit and worry; smoke and worry, smoke and worry.’”



6 WOMEN AND SEXUAL TRAUMA

In contrast to the “typical” male VA patient with PTSD who is most likely to have developed the disorder following some form of combat-related trauma, **the “typical” female VA patient with PTSD is more likely to have experienced some form of sexual trauma.** Therefore, it is important for providers working with women veterans to have a familiarity with the particular issues associated with sexual trauma.

In VA, not asking about sexual trauma is no longer an option. VHA has recently mandated that all veteran patients – **men and women** – be screened for the presence of military sexual trauma. This directive was in response to a Congressional bill mandating the provision of free services related to military sexual trauma for all veterans reporting its occurrence. Consequently, all medical centers are required to have a designated military sexual trauma (MST) coordinator tasked with ensuring that this screening takes place and is documented, developing local implementation guidelines and identifying treatment resources.

For patients identified as having experienced military sexual trauma, all providers are required to indicate if care provided at each visit is related to MST. **This new mandate requires that providers be familiar with the kinds of conditions that may be associated with military sexual trauma.** PTSD and depression are not the only conditions associated with military sexual trauma; multiple physical conditions may be, as well.

VHA has recently mandated that **all** veteran patients – **men and women** – be screened for the presence of military sexual trauma.

Rates of Sexual Trauma in Women

Studies suggest that rates of sexual trauma in veteran and military samples tend to be higher than those in national samples when the length (years in military service versus lifetime experiences) of the study is taken into account:

- 13% of women in national samples report having experienced a sexual assault at some time during their life (Resnick et al., 1993).
- 23% of women veterans who had used VA services reported experiencing a sexual assault while in the military (Skinner, et al., 2000).



Post-Traumatic Stress Disorder: Implications for Primary Care

24

- 20% of women veterans seeking primary care services reported adult sexual trauma (rape), 19.6% early life sexual trauma and 27.4% battering, with an overall rate of 41% having experienced one or more of these traumas (Butterfield et al., 1998).
- 12.5% of a sample of Army women reported experiencing a sexual assault while in the service, which for these women was an average of 4.7 years (Martin, Rosen, Durand, Stretch, & Knudson, 1998).
- 6% of all active duty women reported experiencing an attempted or completed sexual assault within a 12-month period (Defense Manpower Data Center, 1996).

Exposure to sexual trauma in childhood and again during military service may explain high degrees of symptomatology seen in some women veterans.

Rates of childhood sexual trauma also tend to be higher among military populations than in the general public:

- 36.1% of female Marine Corps recruits report pre-military sexual assault or molestation (Wolfe, Turner, Caulfield, Newton, Melia, Martin, & Goldstein, in preparation).
- 44.5% of female Army personnel reports pre-military sexual trauma (Martin et al., 1998).
- 27% of women in a national sample reported childhood sexual abuse (Finklehor, Hotaling, Lewis, & Smith, 1990).

In women who have had childhood trauma, another episode of sexual trauma during adulthood may result in greater symptomatology than would have been seen with childhood trauma alone (Nishith, Mechanic, & Resick, 2000). Exposure to sexual trauma in childhood and again during military service may explain high degrees of symptomatology seen in some women veterans.

In addition to the high rates of sexual assault experienced by women veterans and those currently in military service, women on active duty also report higher than civilian rates of sexual harassment:

- 78% of women in all branches of service reported having experienced some form of sexual harassment within a 12-month period (Defense Manpower Data Center, 1996).
- 44% of female federal employees reported experiencing sexual harassment at work within a 24-month period (United States Merit Systems Protection Board, 1995).



Post-Traumatic Stress Disorder: Implications for Primary Care

25

While the high rate of sexual assault in women veterans has received considerable attention, it is important to remember that women veterans are frequently the victims of domestic violence, another common cause of PTSD. **Among women veterans seeking care in VA Medical Centers, about one-fourth to one-half have experienced domestic violence in their lifetimes** (Caralis & Musialowski, 1997; Coyle, Wolan, & Van Horn, 1996; Murdoch & Nichol, 1995). This is similar to the rates seen in the general population.

Consequences of Sexual Trauma

Although many women who have been sexually assaulted in the past function quite well, others have considerable difficulties. Many problems experienced by these women are those that may present in the primary care setting. These difficulties include interpersonal, social, physical, and psychological problems that may last for many years. Women who have experienced sexual trauma also are more likely to be high users of health care. Of women veterans who report a history of sexual trauma and battering, 37% reported depression, 54% generalized anxiety, 16% panic, 13% alcohol abuse, and 49% more somatic complaints (Butterfield et al, 1998). An increased level of trauma was associated with an increased number of mental disorder symptoms.

23% of women veterans who had used VA services reported experiencing a sexual assault while in the military.

Physical Consequences

Numerous physical problems have been reported to occur with greater frequency in women with sexual trauma histories. The physical symptoms seen after trauma may be at least partially explained by neuroendocrine derangement and can include:

- chronic pelvic pain
- back pain
- fibromyalgia
- headache
- respiratory problems
- gastrointestinal problems
- neurological problems



Post-Traumatic Stress Disorder: Implications for Primary Care

26

A number of medical conditions have been reported to have higher prevalence among women with a history of sexual trauma, including:

- sexually transmitted disease
- pelvic inflammatory disease
- diabetes
- obesity
- arthritis
- asthma
- irritable bowel syndrome
- eating disorders
- hypertension

Medical interventions, including recurrent surgeries, also are more common in women with prior sexual trauma than in other women.

The experience of a sexual assault (for both men and women) may be more likely to lead to PTSD than most other types of traumatic events.

Psychological Consequences

The most widely studied psychological consequence of sexual assault is post-traumatic stress disorder (PTSD). Data from a large scale study that compared the effects of different types of traumatic events suggests that the experience of a sexual assault (for both men and women) may be more likely to lead to PTSD than other types of traumatic events (Kessler, Sonnega Bromet, Hughes, & Nelson, 1995), including combat. In this study,

- 45% of women who reported having experienced a rape met criteria for PTSD;
- 65% of men in the study who had been raped met criteria for PTSD. The proportion of men who experienced a rape (0.7%) was significantly smaller than the proportion of women (9.2%) reporting this experience;
- 38.8% of men who had experienced combat met criteria for PTSD; and
- 26.5% of the women who reported molestation as their most traumatic experience met criteria for PTSD.



Post-Traumatic Stress Disorder: Implications for Primary Care

27

Other psychological conditions associated with sexual trauma include:

- depression
- eating disorders
- substance abuse disorders
- dissociative disorders
- suicidal ideation
- sexual dysfunction
- hostility (which also is a risk factor for hypertension, coronary heart disease and myocardial infarction) (Butterfield et al., 2000)

Sexual Trauma and Healthcare Utilization

Given the increased reports of health problems, it is not surprising that the experiences of **childhood and adult sexual trauma are associated with increased health care utilization and costs.**

A recent study examining HMO health care utilization found that women who reported a history of childhood sexual abuse were more likely to visit the emergency room and had significantly higher annual total health care costs than those without abuse histories (Walker et al., 1999). These differences held even after excluding the costs of mental health care.

Adult sexual trauma victims also appear to use more health care resources (increased physician visits and outpatient costs), even when compared to women who have been victims of other types of crime (Koss, Koss, & Woodruff, 1991).

A large portion of sexual trauma survivors reported unpleasant experiences during a gynecological exam, many of which were not reported to the providers.

Screening for Sexual Trauma

Medical providers sometimes worry that questions about sexual trauma will offend or upset their patients, or that they may feel personally uncomfortable about asking these



Post-Traumatic Stress Disorder: Implications for Primary Care

sensitive questions. In addition, many physicians voice concern that asking about sexual trauma will open up a “can of worms” which they have neither the time nor the expertise to manage. However, although most women report never having been asked by their provider about a history of sexual trauma, data suggest that **the overwhelming majority of women indicate that they would like to be asked** this question (Robohm & Bittenheim, 1996; Friedman, Samet, Roberts, Hudlin & Hans, 1992), though few survivors spontaneously offer this information. The reasons a primary care provider should ask about sexual trauma include:

- screening female patients for the presence of sexual trauma is not only required by the VA, it also is good clinical practice and can improve the patient-provider relationship;
- simply asking about a trauma history and responding empathically to disclosure (“I’m sorry that that happened to you; no one has the right to hit another person/force another person to have sex”) helps the woman to feel validated and to know that this history, about which she may feel shame, will not interfere with the patient-provider relationship; and
- if the woman is experiencing ongoing stress related to prior trauma, knowing about the trauma allows the clinician to offer a mental health referral, which may be useful for trauma processing, stress reduction or coping with chronic pain, or for pharmacological treatment of depression or PTSD.

Performing a Safety Assessment to Ensure Veteran is not Currently in Danger

Assessing for current danger is a crucial issue for veterans with a history of sexual trauma and possible ongoing domestic violence. **Major risk factors for potential serious injury or death** include:

- escalating frequency or severity of abuse
- presence of firearms in the home
- jealous or controlling behavior by the perpetrator
- suicidal or homicidal ideation by the perpetrator
- the woman’s own sense that she is in danger

The overwhelming majority of women indicate that they would like to be asked by their provider about a history of sexual trauma.



Post-Traumatic Stress Disorder: Implications for Primary Care

By identifying a history of sexual trauma, providers can anticipate problems that may arise in interactions with patients, such as the possibility that pelvic examinations may be distressing because they remind the patient of her trauma experience. When this information is known, a number of things can be done to reduce the likelihood of distress, including:

- normalizing the patient's concerns,
- reducing the power differential between clinician and patient,
- engaging in a dialogue throughout the exam,
- planning ahead, and
- respecting the patient's wishes.

In one study, women who had and had not experienced childhood sexual trauma reported anxiety during a pelvic exam (Robohm & Buttenheim, 1996). However, the two groups of women reported different reasons for their discomfort.

- Women who had been sexually traumatized reported that having their sexual organs examined was the primary reason for discomfort.
- Women who had not been sexually traumatized reported that physical discomfort was their most common reason for discomfort.

A large number of sexual trauma survivors reported unpleasant experiences during a gynecological exam, with many not reported to the providers. These symptoms included:

- overwhelming emotions,
- unwanted or intrusive thoughts,
- the triggering of traumatic memories, and
- feelings of detachment from the body.

Summary

- 1) The “typical” female VA patient with PTSD is more likely to have experienced some form of sexual trauma than exposure to combat.
- 2) Rates of both adult and childhood sexual trauma tend to be higher in veteran and military populations than in the general population, and rates of domestic violence are high.
- 3) Sexual trauma survivors are more likely to have numerous medical problems, psychological problems and to be high users of health care.
- 4) VHA has mandated that all (male and female) patients be screened for the presence of military sexual trauma.



7 MEN AND SEXUAL TRAUMA

At least 10% of men in the United States have suffered from trauma as a result of sexual assault. Like women, men who experience sexual assault may suffer from depression, PTSD and other emotional problems as a result of trauma. However, because men and women have different life experiences due to their gender role, emotional symptoms following trauma can look different in men than they do in women.

Problems Related to Sexual Trauma in Men

While men are perpetrators in about 86% of male victimization cases, when the assailant is a woman, the impact of sexual assault upon men may be downplayed by professionals and the public. However, men who have early sexual experiences with adults report problems in various areas at a much higher rate than those who do not.

Emotional Disorders

Men who were sexually assaulted are more likely to suffer from PTSD, other anxiety disorders and depression as compared to those who were never abused sexually (Lisak, D., 1994).

Substance Abuse

Men who have been sexually assaulted have a high incidence of alcohol and drug use. For example, the probability for alcohol problems in adulthood is about 80% for men who have experienced sexual abuse, as compared to 11% in men who have never been sexually abused (Bauserman, & Rind, 1997).

Risk-Taking Behavior

Exposure to sexual trauma in males can lead to risk-taking behavior, such as behaviors that increase risk for contracting the HIV virus (i.e., having sex without using condoms) (Carballo-Diequez, & Dolezal, 1995).

Men are more likely than women to feel ashamed of the assault, not talk about it and not seek help from professionals.



Post-Traumatic Stress Disorder: Implications for Primary Care

The Impact of Gender Socialization upon Men who have been Sexually Assaulted

Because of their experience of sexual assault, some men attempt to “prove” their masculinity by becoming “hyper-masculine.” For example, some men deal with sexual assault by having multiple female sexual partners or engaging in dangerous “macho” behaviors to “prove” their masculinity. Parents of boys who are sexually abused may inadvertently encourage this process.

Men who more readily acknowledge their assault may have to struggle with feeling ignored and invalidated by the attitudes of others who do not recognize that men also can be victimized.

Because of ignorance and myths about sexual abuse, men sometimes fear that the sexual assault by another man will “cause” them to become gay. This belief is false. Sexual assault does not “cause” someone to have a particular sexual orientation.

Because of these various gender-related issues, men are more likely than women to feel ashamed of the assault, not talk about it, and not seek help from professionals (Collings, 1995; Gordon, 1990).

Are Men who were Sexually Assaulted as Children more likely to become Child Molesters?

Another myth that male victims of sexual assault face is the assumption that they will become abusers themselves. For instance, they may have heard that survivors of sexual abuse tend to repeat the “cycle of abuse” by abusing children themselves. Survivors may become alarmed if they have thoughts of sex with male children.

Some research has shown that men who were sexually abused by men during their childhood have more thoughts that are sexual and fantasies about sexual contact with male children and adolescents. However, it is important to know that **most male victims of child sexual abuse do not become sex offenders.**

Furthermore, many men who sexually assault do not have a history of child sexual abuse. Rather, sexual offenders more often grew up in families where they suffered from several forms (such as physical and emotional) of abuse. Men who assault others also have difficulty with empathy, and thus are unable to put the needs of their victim above their own.



8 SCREENING AND REFERRAL PROCEDURE OVERVIEW

- A. Routine screening administration.** A traumatic stress self-report screening instrument can be distributed before a medical appointment to all patients. Completed screens are collected and reviewed by the physician, nurse, physician's assistant or a mental health consultant to identify patients who are likely to be experiencing distressing post-trauma reactions. Screening items also can be added to standard medical history forms that patients complete at first visits.
- B. Discussion and referral.** After a review of the screen results and discussion with the patient, the provider can decide whether the veteran may benefit from further specialized mental health evaluation. Patients with positive screens may be referred, depending upon availability, to specialized PTSD treatment, behavioral medicine or more general mental health services for further evaluation and possible treatment. It is important to understand the specificity of screening instruments. Some patients who screen "positive" do not actually have PTSD on detailed clinical evaluation by a mental health professional. However, screening instruments increase a primary care provider's ability to detect possible PTSD and to initiate appropriate referral. Patients with PTSD should be explicitly screened for suicidal ideation, as well.
- C. Educational materials.** Patients who screen positive for PTSD (and their families) also may benefit from educational materials about trauma and PTSD. An information sheet entitled "Understanding Trauma and PTSD" is included in Appendix C.
- D. Follow-up.** At the patient's next visit, it is important to ask whether he or she followed through with the referral for mental health evaluation or care. If the patient did follow through, was the referral perceived as helpful? Is the patient still in need of care? If the patient did not follow through with the referral and still has symptoms, what were the obstacles to obtaining care?

If the Veteran Refuses Referral to Mental Health

Many patients are reluctant to participate in mental health treatment. Common reasons include discomfort with the idea of seeing a psychologist or psychiatrist, perceived stigma associated with treatment, previous negative experiences with mental health, negative attitudes towards the VA, a lack of confidence in the helpfulness of counseling or a reluctance to open up old emotional wounds. Faced with this situation, the primary practitioner can do several things (all of which can serve to raise the likelihood of acceptance of a referral):



Post-Traumatic Stress Disorder: Implications for Primary Care

33

- **Suggest an evaluation, rather than treatment.** Sometimes, it is useful to suggest that the patient meet with a mental health professional to learn more about post-traumatic stress, ask questions, and consider together whether more contacts will be useful.
- **Normalize the idea of treatment.** Explain that treatment involves common sense activities that include learning more about PTSD, finding and practicing ways of coping with trauma-related symptoms and problems, taking steps to improve relationships with family and friends and making contact with other veterans who experience similar problems.
- **Give the patient educational materials** (see Appendix C) that describe PTSD and its common co-morbid conditions (depression and substance abuse), treatment for PTSD and coping with PTSD. Sometimes he or she will read the materials later, and begin to think more carefully about participation in treatment.
- **Give information on different ways the veteran can seek assistance,** such as (depending on local availability) the closest VA specialized PTSD treatment programs, general VA mental health services, women veterans treatment programs, Readjustment Counseling Service Vet Centers, online resources, and local community, spiritual and mental health resources other than the VA.
- **Consider involving the veteran's spouse or partner in the discussion,** if it seems appropriate and if permission is granted to help clarify the impact of PTSD on others in the veteran's life and thereby increase motivation to change.
- **Make sure to follow up on the issue in the next appointment,** and keep track of the veteran's progress with respect to PTSD.



9 IMPLEMENTING SCREENING PROCEDURES

As noted above, routine assessment of traumatic stress symptoms is warranted because such symptoms can affect general health and health care utilization, and because in the absence of explicit questioning, patients are unlikely to disclose traumatic experiences. An efficient way to accomplish an inquiry regarding previous trauma exposure and post-trauma symptoms is by including screening questions in the standard intake forms that patients routinely complete.

An efficient way to accomplish an inquiry regarding previous trauma exposure and post-trauma symptoms is by including screening questions in the standard intake forms that patients routinely complete.

Screening Tool and Procedure

The next page shows the Primary Care PTSD Screen (PC-PTSD) that has been designed for use in primary care and other medical settings (Prins, Kimerling, Cameron, Oumiette, Shaw, Thrailkill, Sheikh & Gusman, 1999). Like the CAGE, a brief questionnaire for detecting substance abuse problems, **the PC-PTSD is brief and problem-focused**. The screen does not include a list of potentially traumatic events. There are at least two reasons for this. First, studies on trauma and health in both male and female veterans suggest that the active mechanism linking trauma and physical health is the diagnosis of PTSD (Taft, Stern, King, & King, 1999; Wolfe, Schnurr, Brown, & Furey, 1994). In other words, the relationship between trauma and health appears to be mediated through a current PTSD diagnosis. Second, a symptom-driven screen, rather than a trauma-focused screen, is attractive to primary care staff who may not be able to address a patient's entire trauma history during their visit with the patient. Such a trauma inquiry might be especially problematic with a VA population where the average number of traumatic events meeting Criterion A for PTSD is over four (Prins et al., 1999).

A positive response to the screen does not necessarily indicate that a patient has post-traumatic stress disorder, but it does indicate that a patient may have PTSD or trauma-related problems and that further investigation of trauma symptoms by a mental health professional may be warranted.



Post-Traumatic Stress Disorder: Implications for Primary Care

35

Primary Care PTSD Screen

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you...

- | | | |
|-----|----|--|
| YES | NO | 1. Have had nightmares about it or thought about it when you did not want to? |
| YES | NO | 2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it? |
| YES | NO | 3. Were constantly on guard, watchful, or easily startled? |
| YES | NO | 4. Felt numb or detached from others, activities, or your surroundings? |
-

Validation of the PC-PTSD is ongoing. To date, over 200 male and female VA patients have completed the screen and participated in a diagnostic interview two weeks later. While 25% of these patients reported PTSD symptoms, a review of their records indicated that PTSD is often undetected. Indeed, only 15% of patients with PTSD had this diagnosis recorded in their medical chart.

Current research suggests that the results of the PC-PTSD should be considered “positive” if a patient answers “yes” to any two items or the single hyper-arousal item.

A positive response to the screen does not necessarily indicate that a patient has post-traumatic stress disorder, but it does indicate that a patient **may** have PTSD or trauma-related problems and that further investigation of trauma symptoms by a mental health professional may be warranted. Current research suggests that the results of the PC-PTSD should be considered “positive” if a patient answers “yes” to *any* two items *or* the single hyper-arousal item.

In addition to the PC-PTSD, several other screens have been developed for use in primary care (e.g., VA Major Depressive Disorder Clinical Practice Guidelines for Depression PTSD screen; <http://www.va.gov/HEALTH/mdd.hlp>) and other settings (e.g., Breslau et al., 1999; Stein et al., 2000; McIntyre, 1999). The reason we are advocating the screen listed above is that it has been tried out in a veteran population with good reliability and effectiveness in identifying trauma survivors.



Post-Traumatic Stress Disorder: Implications for Primary Care

Included in Appendix D are some other screens (including the VA Practice Guidelines for Depression in Primary Care PTSD screen), which may be used in place of the PC-PTSD according to the preferences of the provider. The process of responding to “positives” on the alternative screens is similar to that outlined here with regard to the PC-PTSD.

Guidelines for Discussing Screening Results with Patients

During implementation of screening and referral procedures, medical and nursing providers can respond sensitively and appropriately to these patients by following several practical steps:

A. Ensure privacy.

- While meeting with the patient, close the door and keep family members out of the room. Patients who have been traumatized may not have shared this information with family members and may be quite reluctant to talk about these issues in the presence of others.
- After discussion with the patient and obtaining permission, it may be possible to invite family members to participate in a brief discussion to enlist their cooperation in supporting an evaluation by a mental health specialist.
- It is imperative that the patient knows the limits of confidentiality for medical professionals, especially in cases where family violence may be ongoing, because clinicians are mandated reporters for suspected ongoing abuse of children and dependent adults.
- Discussion of possible abuse should take place in the absence of the suspected perpetrator; if the abuser is present, victims may deny abuse for fear of retaliation.

B. Orient the patient to the following line of questioning.

- Mention that one of the intake questionnaires included a few questions about stress reactions common in many veterans who have been exposed to traumatic experiences in their lives, in combat or out.
- Inform patients that traumatic events and the distress they create can have important effects on the body and on health, as well as on the veteran’s psychological functioning.
- Explain that you are opening this discussion as part of an effort to provide more comprehensive health care, and that a greater understanding and recognition of symptoms of post-traumatic stress may be of benefit, both psychologically and physically.



Post-Traumatic Stress Disorder: Implications for Primary Care

37

- Let the veteran know that you ask all your patients these questions; you are not singling him/her out.

C. Ask about traumatic events.

If the patient has been administered the PC-PTSD, the practitioner can say:

“I notice from your answers to our questionnaire that you do experience symptoms of stress. Many of my patients have experienced extremely distressing events at some time in their lives, such as combat, physical or sexual assault (being hit or hurt or forced to have sexual contact against their will), or a bad accident, and sometimes those events lead to the kinds of symptoms you have. Have you ever had any experiences like that?”

If a provider wishes to assess for traumatic stress symptoms but the screen has not been administered, the following sentence may help to introduce the subject:

“Many of my patients have experienced extremely distressing events at some time in their lives, such as combat, physical or sexual assault (being hit or hurt or forced to have sexual contact against their will), or a bad accident. Have you ever had any experiences like that?”

The idea in talking about traumatic events is to briefly learn whether the person has indeed been exposed to trauma, and to better understand an aspect of the patient’s history that may be exerting a profound influence on health.

In discussing traumatic experiences, it may be helpful to **avoid value-laden terms such as “abuse,” “rape,” “sexual trauma” or “victimization,” especially if the patient does not use those terms.** These terms are emotionally laden, and may not be understood by the patient (for example, he or she may not think of what happened during childhood as incest, or may not realize that having been forced to have sex by his/her significant other was a rape). Instead, **questions should be behaviorally based** (Bradley, 1998):

“Did you ever have an experience where someone used force or the threat of force to have sexual contact with you against your will?”

It is also important to make no assumptions about the meaning or impact of traumatic events for an individual; any assumptions you might make about the impact of the trauma may be inconsistent with the patient’s feelings and experience.



Post-Traumatic Stress Disorder: Implications for Primary Care

38

Generally, the idea in talking about traumatic events is to learn whether the person has indeed been exposed to trauma and to better understand an aspect of the patient's history that may be exerting a profound influence on health. This usually can be accomplished by briefly enquiring into the nature of the trauma (without asking for many details) and then moving on with the referral process.

Most practitioners will want to avoid a detailed discussion of the traumatic experiences themselves. First, this takes time. Second, it may be emotionally upsetting for the patient. Third, it is not necessary in that the helping process outlined here primarily involves referring the patient for an assessment interview with a mental health colleague who has the expertise to help the patient relate and process details of the trauma in a therapeutic way.

If a person is currently in an abusive relationship, the clinician should perform a safety assessment to ensure that he or she is not in immediate danger.

D. Perform a safety assessment to ensure the veteran is not currently in danger

Assessing for current danger is a crucial issue for veterans with a history of sexual trauma and possible ongoing domestic violence. Addressing the patient's immediate safety may be necessary if he or she continues to be experiencing danger, such as domestic or urban violence or sexual abuse. Primary care providers should be knowledgeable about major risk factors and inquire about these in the course of screening for sexual trauma and ongoing violence.

One might ask:

“Are any dangerous or life-threatening experiences continuing in your life now?”

Included with these questions should be inquiry into domestic violence experiences:

“Because violence is so common in our society, I ask all my patients about their experiences. Has your partner ever hit, kicked, threatened, or otherwise frightened or hurt you?”

For a patient in an established relationship, general questions can be helpful:

“What happens when you and your partner fight?”



Post-Traumatic Stress Disorder: Implications for Primary Care

39

Major risk factors for potential serious injury or death include:

- escalating frequency or severity of abuse
- presence of firearms in the home
- jealous or controlling behavior by the perpetrator
- suicidal or homicidal ideation by the perpetrator
- the person's own sense that she is in danger ("Are you afraid to go home today?" "Are any dangerous or life-threatening experiences continuing in your life now?")

If ongoing threats to safety are present:

- acknowledge the difficulty in seeking help when trauma has not stopped.
- determine if reporting is legally mandated and, if so, develop a plan with the patient to make the report to increase and not reduce the safety of the patient and his or her loved ones.
- if reporting is not appropriate, provide written information about local helping resources and establish a plan that the patient will agree to in order to move toward increased safety.
- see Appendix E for further information on mandated reporting procedures.

If a patient is experiencing ongoing domestic violence and the perpetrator finds that the victim is in possession of a crisis resource list, the perpetrator may retaliate and violence may escalate. The advantages and disadvantages of carrying home written information must thus be discussed with the patient. All patients should be advised of where to find this information in the local telephone directory or Internet site.

The details of establishing a safety plan and addressing the domestic violence are beyond the scope of this course, but excellent resources including the Internet site (www.feminist.org/911/crisis.html) and hotlines (National Domestic Violence Hotline: 800/799-SAFE; Rape, Abuse, Incest National Network: 800/656-HOPE) are readily available.

E. Clarify whether screen items to which the patient responded "yes" are really trauma-related symptoms.

Sometimes, patients will interpret screen questions in such a way that they give a positive response to an item but have not had a traumatic experience and do not have PTSD symptoms.



Post-Traumatic Stress Disorder: Implications for Primary Care

40

It often is possible to quickly clarify that endorsed items really do refer to a traumatic event and are post-traumatic symptoms. The simplest way to accomplish this is to ask a patient to describe any symptoms endorsed in a bit more detail.

For example, if the patient endorsed item #1 on the PC-PTSD, one could say:

“I see that you have said you have nightmares about or thought about an upsetting experience when you did not want to. Can you give me an example of these nightmares or thinking about an upsetting experience when you didn’t want to?”

If, in response to this query, a patient gives an example of a symptom that does not appear to be a post-traumatic symptom or does not appear to be in response to a traumatic event, it may be that his or her response to the screen is a “false positive” response and that he or she does not have PTSD. For example, if a patient were to respond “I broke up with my boyfriend three weeks ago and I am very depressed about it and think about it all the time,” you might conclude that the patient is experiencing rumination about a negative life event rather than intrusive thoughts about a traumatic stressor.

Traumatic events that cause PTSD are generally high magnitude events that occur suddenly and overwhelm a person with fear and helplessness.

Remember that traumatic events that cause PTSD are generally high magnitude events that occur suddenly and overwhelm a person with fear and helplessness. Typically, these events involve actual or threatened injury or death. Of course, other stressful events (such as discovering one’s spouse being unfaithful or being fired from a job when one’s career is a major source of identity and self-worth) may create problems that also may warrant a mental health referral.

F. Clarify whether screen items to which the patient answered “yes” are disruptive to the patient’s life.

Asking a patient about the impact of symptoms on his or her social and occupational functioning also may help clarify whether a patient is suffering from PTSD and requires a referral. One could ask:

“How have these thoughts, memories or feelings affected your life? Have they interfered with your relationships? Your work? How about with recreation or your enjoyment of activities?”



Post-Traumatic Stress Disorder: Implications for Primary Care

41

Positive responses to these questions in addition to endorsement of trauma symptom items indicate increased likelihood that the patient has PTSD and needs further evaluation.

Patients with PTSD should be explicitly screened for suicidal ideation, as well.

G. Discuss PTSD and nature of treatment/Acknowledge and validate patient's thoughts and emotions.

As the discussion of screening results takes place, it will be helpful to give the patient information about PTSD and to discuss what happens when a veteran seeks treatment for PTSD.

Key messages to convey to the patient include:

- PTSD symptoms are experienced by many veterans who have been exposed to traumas in war or civilian life.
- the person with PTSD is not “crazy.”
- PTSD often reduces quality of life for the veteran; it affects family relationships, happiness and health.
- treatment can help improve the veteran's life.
- goals of PTSD treatment are to help the veteran better understand his/her reactions to trauma, allow him or her to share experiences with other veterans with similar problems and learn to manage painful memories and emotions.
- PTSD treatment involves education about PTSD, instruction in coping skills and emotional support from counselors and other veterans.

Help the patient set bounds upon his or her disclosure of the trauma, so that the patient does not disclose more than he/she is psychologically ready to reveal.

Give the patient the handout in Appendix C (“Information Sheet: Understanding Trauma and PTSD”). **Practitioner and patient can briefly review the materials together** and this can make it an easier job to explain PTSD. The patient can take the materials away for later review.



Post-Traumatic Stress Disorder: Implications for Primary Care

As your discussion with the patient unfolds:

- acknowledge any reported distress
- show interest and concern, and tell the patient that you are glad that he or she has told you about the symptoms
- offer empathic support if a patient discloses specifics about traumatic experiences

At this point, unless you have appropriate mental health training and will be the person to evaluate or treat the patient, it is not advisable to elicit a detailed account of the trauma or to challenge the patient's report in any way. Instead, it may be more therapeutic to help patients set bounds upon their disclosure of the trauma, so that they do not disclose more than they are psychologically ready to reveal. For example, a patient may disclose that she was raped by her superior officer, that she has never told anyone about it and that she still has terrifying nightmares about it. This information is appropriate for the primary care provider to know. The primary care clinician can respond empathically, e.g., "I'm sorry that happened to you and I think it must be hard for you to talk about it with me." But if the patient begins to describe more explicit details of the attack (e.g., what her assailant said during the assault, what he did and what she did), it may be useful to help her make a transition back to a medical focus. This has to be done gently, so she does not feel that her story (which she may have been afraid to disclose to anyone before) is not being dismissed as trivial or revolting to the provider. For example, the provider might say,

"I'm grateful that you were able to share with me what happened to you, as it has implications for your physical health and emotional well-being. It is generally better to wait to describe the details of a traumatic experience until you have established a relationship with a counselor. That allows you to work through all the feelings associated with those memories in a step-by-step manner, with the help of someone who, unlike me, is an expert in this area. I collaborate with some excellent counselors, and many of my patients with traumatic experiences have found it really helpful to work with one. Would you like to talk to someone who works with patients who have trauma-related symptoms to learn about treatments that may help you with the nightmares?"

H. Make a recommendation for further evaluation and provide referral.

If it appears that a patient does have active PTSD symptoms:

- explain why the screen results lead you to recommend that he or she seek further evaluation and/or treatment with a specialist.



Post-Traumatic Stress Disorder: Implications for Primary Care

43

- encourage the patient to voice any reservations or concerns he or she might have about seeking treatment. You may be able to facilitate pursuit of treatment by listening to these concerns, acknowledging their validity and addressing some of their questions about what to expect during evaluation and treatment.
- emphasize that untreated PTSD symptoms are not likely to go away on their own, especially if the person has had PTSD symptoms for years. (Note: if the patient was traumatized very recently and has had the symptoms for only a few days or weeks, the symptoms may remit without formal intervention. It is recommended that the physician nonetheless encourage early contact with a mental health professional and continue to monitor symptoms on an ongoing basis).
- explain to patients that, although a wish to avoid any reminders of the trauma is natural, this avoidance may actually interfere with recovery. It may prevent potentially helpful processes that result from talking through the experience, receiving social support or receiving specialized treatment.
- provide the patient with a written referral to a mental health professional.

I. Provide information to the mental health professional.

It will be helpful to the mental health professional who receives the referral to have as much information as possible about the patient's condition. If possible, provide the mental health professional with:

- a copy of the PC-PTSD results,
- any symptoms concordant with PTSD, as well as any historical information that the patient offers about his or her trauma,
- any relevant information about health events or injuries that might have been traumatic, and
- information about any suspected negative impact of the patient's post-traumatic symptoms on health or medical compliance.

J. Schedule a follow-up.

Schedule in-person or telephone follow-ups within a relatively short interval after initial disclosure of the traumatic event (e.g., 1-2 weeks). The goals of this follow-up are to reassess the patient and ensure that he/she made it to the mental health referral. A short follow-up interval also communicates to the patient that he or she is not being abandoned by the primary care provider. This can be especially important if the patient was referred



Post-Traumatic Stress Disorder: Implications for Primary Care

to mental health, which the patient could incorrectly perceive as being “dumped” by the primary care provider. Patients who have just disclosed that they have had a socially taboo experience about which they feel shame or guilt (e.g., being raped or participating in an atrocity) may feel particularly sensitive to actions by medical providers that suggest they are being dismissed or marginalized.

During the period of active mental health treatment for PTSD, medical symptoms (e.g., headaches and irritable bowel syndrome) may flare; frequent, brief, scheduled office visits during this period may decrease unscheduled urgent care utilization, increase opportunities to intervene to improve comfort and help to reassure the patient.

Summary: Guidelines for Discussing Screening Results with Patients

- A. Ensure privacy
- B. Provide orientation to this line of questioning
- C. Briefly ask about traumatic events
- D. Perform a safety assessment to ensure veteran is not currently in danger
- E. Clarify whether endorsed screen items are really trauma-related events
- F. Clarify whether endorsed screen items are disruptive to patient’s life
- G. Discuss PTSD and nature of treatment
- H. Recommend further evaluation and provide referral (if indicated)
- I. Provide information to the mental health professional
- J. Schedule a follow-up in primary care



10 TREATMENTS FOR PTSD

The VA PTSD Treatment System

Because the primary care provider may want to discuss the option of treatment with the veteran, it is important that he or she understand the nature of PTSD treatment as it is typically offered in the VA. Such treatment may be provided in a number of different settings, including specialized PTSD treatment programs (residential or outpatient), specialized women's trauma treatment services, Readjustment Counseling Service "Vet Centers" (community-based treatment services) and general mental health services offered in VA health care systems.

Participation in ongoing veteran support groups is an important treatment method and is a centerpiece of many VA treatment programs.

While there is much variation across specialist PTSD programs and mental health services generally, a referral for PTSD treatment within the Veterans Affairs Health Care System will typically mean that the veteran will be offered:

- a careful mental health assessment
- individual counseling
- group support
- as appropriate, prescription of psychotropic medications designed to treat PTSD (and related problems like sleep difficulties, anger problems or depression)

Patients entering treatment are usually educated about trauma and its impact and trained in a variety of skills for coping with PTSD or its effects on various areas of their lives. Such training commonly addresses stress or anxiety management skills (e.g., relaxation, deep breathing and self-talk), interpersonal communication skills, and anger management or conflict resolution skills. Treatment also focuses on reducing the isolation of the veteran and improving his or her family relationships. For a patient who is not yet ready to talk about the trauma, learning these concrete skills can improve day to day functioning and prepare them for a more intensive phase of therapy.



Post-Traumatic Stress Disorder: Implications for Primary Care

Participation in ongoing veteran support groups is an important treatment method and is a centerpiece of many VA treatment programs. It often is helpful for veterans with PTSD to meet and listen to other trauma survivors. This can be a very helpful experience in which they can learn what is working for others and share their experience and lessons with others. PTSD support groups usually are led by professional counselors.

Often, the veteran with PTSD has never told anyone about his or her experiences. This changes when the veteran enters treatment. In the assessment process, the mental health professional typically explores some details of the traumas in order to better understand the patient. In addition, some PTSD therapists help the veteran talk about his or her traumatic experiences in detail as a treatment method. This kind of treatment may be delivered in a variety of ways, but each has in common the fact that the veteran is asked to talk in detail about what happened at the time of the trauma. Such treatment goes by a variety of names, including exposure therapy, flooding, trauma narrative therapy and trauma focus group treatment. It has goals that can include reducing the degree of emotional and physical arousal associated with the memories, rethinking negative interpretations of the traumatic experiences, making “meaning” of what happened or simply sharing the experience with someone who can understand or advise. Often, this is done in the presence of other veterans with PTSD who are in a unique position to offer support.

Generally, the goals of PTSD treatment are to:

- help the veteran better understand his/her reactions to trauma,
- allow him or her to share experiences with other veterans with similar problems,
- teach the veteran to better cope with painful memories, emotions and problems,
- help the veteran tackle his trauma-related problems, such as substance abuse or depression,
- reduce social isolation, and
- improve family relationships.

Empirical Evidence Regarding Behavioral Treatments

The trauma treatment research field is still young, and treatment research can be complicated and difficult to conduct. Because of this, comparisons of different treatments for PTSD are scarce; therefore, when evaluating the literature, lack of empirical evidence does not equate with lack of treatment efficacy. The current process by which trauma experts evaluate treatment options is to study the empirical literature, as well as take into account clinical



Post-Traumatic Stress Disorder: Implications for Primary Care

consensus on treatments which have proven effective in case studies or across clinical settings. The choice of a treatment modality is based on many factors, including:

- unique client life challenges,
- side/potential negative effects,
- cost and length of treatment,
- cultural appropriateness,
- therapist's resources and skills,
- client's resources and stressors,
- co-morbidity of other psychiatric symptoms,
- the fluctuating course of PTSD,
- the need to foster resilience, and
- legal, administrative and forensic concerns.

While there is limited empirical literature on which to base comparisons of alternative treatment methods, there are a number of treatment approaches that have gained empirical support. Some of these treatments have shown promising results across a number of different contexts and with different trauma populations, are available within VA and merit strong consideration when considering referral options. Listed below are some treatments that have gained empirical support (Friedman, 2000), as well as treatments that are commonly used within the VA Health Care System.

Cognitive-Behavioral Therapy (CBT)

There are more published, well-controlled studies on CBT than on any other PTSD treatment (over 30). CBT treatments for PTSD include:

- exposure therapy, in which patients are asked to describe their traumatic experiences in detail, on a repetitive basis, in order to reduce the arousal and distress associated with their memories;
- cognitive therapy, which focuses on helping patients identify their trauma-related negative beliefs (e.g., guilt or distrust of others) and change them to reduce distress; and
- stress-inoculation training, in which patients are taught skills for managing and reducing anxiety (e.g., breathing, muscular relaxation or self-talk).



Post-Traumatic Stress Disorder: Implications for Primary Care

CBT treatments usually involve some combination of the above methods, combined with education about PTSD, and development of a good therapist-patient relationship. Other CBT treatment methods may be added to address related problems, such as anger (anger management training and assertiveness training) or social isolation (social skills training and communication skills training).

In general, cognitive-behavioral methods have proven very effective in producing significant reductions in PTSD symptoms (generally 60-80%) in several civilian populations (especially rape survivors), but degree of change accomplished is likely to be somewhat less in veterans with chronic combat-related PTSD. The magnitude and permanence of treatment effects appears greater with CBT than with any other treatment.

Eye Movement Desensitization and Reprocessing (EMDR)

EMDR involves having the patient bring to mind images of the trauma while engaging in back-and-forth eye movements (or alteration of attention back and forth via taps or sounds). It also addresses trauma-related negative beliefs. It has been shown to be more effective than placebo wait list (patients are put on a waiting list to receive treatment, but don't actually receive it in the time they are tested), psychodynamic, relaxation or supportive therapies. Research comparing EMDR to more standard cognitive-behavioral techniques shows significantly better results have been obtained with CBT than with EMDR, particularly at the three month follow-up, showing greater sustainability of CBT results. Research looking at the different components of EMDR shows that the eye movement component does not add any additional treatment effect above and beyond the imagery exposure and addressing of negative beliefs.

Psychodynamic Therapy

Research on the use of psychodynamic therapy is difficult to conduct, because psychodynamic techniques do not focus on symptom reduction, but rather on more fluid intra- and interpersonal processes. To date, there has been only one randomized clinical trial on the efficacy of psychodynamic treatment in reducing PTSD symptoms, in which 18 sessions of Brief Psychodynamic Psychotherapy were shown to effectively reduce PTSD intrusion and avoidance symptoms by approximately 40%, and improvement was sustained for three months. While clinicians often support the utilization of psychodynamic techniques in treatment of trauma, particularly more complex trauma, much more research is needed to demonstrate their effectiveness with PTSD.



Post-Traumatic Stress Disorder: Implications for Primary Care

Group Therapy

Group therapy is a major treatment form within VA. While various studies have shown beneficial effects of most group treatments with respect to psychological distress, depression, anxiety and social adjustment, there have been few rigorous tests of group treatments in which effects on PTSD symptoms have been measured. Three studies of CBT group treatments (including Cognitive Processing Therapy, Assertion Training and Stress Inoculation Therapy) have been conducted with women traumatized by childhood or adult sexual abuse. All PTSD symptom clusters were reduced 30-60%, and improvement was sustained for six months. One CBT group treatment for combat veterans showed a 20% reduction in PTSD symptom severity. One study of psychodynamic group treatment found an 18% reduction in PTSD symptoms among women with PTSD due to childhood sexual abuse. One controlled trial of supportive group treatment for female sexual assault survivors showed a 19-30% reduction in intrusion and avoidance symptoms, which was maintained for six months.

Inpatient Treatment

There have been no satisfactory studies on inpatient treatment for PTSD and trauma-related conditions. However, clinical consensus agrees that it is appropriate for crisis intervention, management of complex diagnostic cases, delivery of emotionally intense therapeutic procedures and relapse prevention.

Marital and Family Therapy

There are no research studies done on the effectiveness of marital/family therapy for the treatment of PTSD. However, because of trauma's unique effects on interpersonal relatedness, clinical wisdom indicates that spouses and families be included in treatment of those with PTSD. Of note, marriage counseling is typically contraindicated in cases of domestic violence, until the batterer has been successfully (individually) rehabilitated.

Social Rehabilitative Therapies

While social rehabilitative therapies (i.e., teaching social, coping and life function skills) have been proven effective in chronic schizophrenic and other persistently impaired psychiatric cohorts, they have yet to be formally tested with PTSD clients. Since they appear to generalize well from clients with one mental disorder to another, it is reasonable to expect that they also will work with PTSD clients. There is clinical consensus that appropriate outcomes would be improvement in self-care, family function, independent living, social skills and maintenance of employment.



Post-Traumatic Stress Disorder: Implications for Primary Care

Hypnosis

While research on the use of hypnosis with trauma survivors indicates very little improvement in trauma symptoms, clinical consensus indicates that it can be helpful as an adjunctive rather than primary treatment, especially with dissociation and nightmares.

Creative Therapies

There currently is no controlled evidence on creative therapies (art, drama, music or body-oriented therapies). Some clinicians believe that such therapies are uniquely fitted to address specific somatic manifestations of trauma (i.e., sensory defensiveness, somatic memories, etc.). There is some caution with somatic treatments with respect to the need to maintain physical safety and appropriate professional boundaries, so it is important that therapists be well trained in this modality.

Preventive Treatment Approaches

There is some reason to believe that early treatment following exposure to trauma may prevent development of PTSD in some persons. There has been recent empirical support for brief (five-session) cognitive-behavioral-based treatment as being significantly more preventive of PTSD than supportive treatment. The most widely used early intervention for trauma (other than general support and rest) is debriefing (or “critical incident stress debriefing”). Debriefing is usually a group process in which trauma survivors are led by a facilitator to review the facts, thoughts and emotions associated with their experience. While there is strong clinical consensus that it is a very helpful measure following a single-incident trauma, (especially for those who work with trauma survivors, such as firefighters or emergency room nurses), there is no good evidence that debriefing can prevent PTSD in those at high-risk for it (and some suggestion that it may worsen their symptoms). The limited evidence available, therefore, suggests that those at higher risk (e.g., those diagnosed with Acute Stress Disorder) are best treated individually with a more intensive treatment model.



11 PHARMACOTHERAPY FOR PTSD

Pharmacotherapy for PTSD is a rapidly evolving field that is receiving increasing research attention. In the VA, pharmacotherapy is rarely used as a stand-alone treatment for PTSD, but instead, is usually combined with psychological treatment. This section reflects the latest thinking available and provides an update on the recommendations for PTSD medication practices included in the Major Depressive Disorder Clinical Practice Guidelines for Depression (Mental Health Strategic Healthcare Group and Major Depressive Disorder Working Group, 1997; <http://www.va.gov/HEALTH/mdd.hlp>).

The U.S. Food and Drug Administration has approved the Selective Serotonin Re-uptake Inhibitor (SSRI) sertraline (Zoloft) as an indicated treatment for PTSD. In two large multi-site trials with civilians (mostly Caucasian females with PTSD resulting from child or adult sexual and/or physical abuse), sertraline was shown to be significantly more effective than a placebo. Furthermore, sertraline's efficacy was broad-spectrum suppression of all three clusters (re-experiencing, avoidance/numbing and hyperarousal) of PTSD symptoms. In addition, sertraline produced significant global improvement.

SSRIs are definitely the first line medications for PTSD pharmacotherapy.

There was some question after the sertraline trials whether SSRI treatment was as effective for men and for combat veterans as it clearly was for women with non-combat trauma. Subsequent **large-scale trials with the SSRI paroxetine (Paxil) suggest that SSRI treatment is definitely effective both for men in general and for combat veterans.** Further evidence for SSRI efficacy in men and combat veterans comes from recent studies with the SSRI fluoxetine (Prozac). Therefore, **SSRIs are definitely the first line medications for PTSD pharmacotherapy.** They have a broad spectrum of action against all clusters of PTSD symptoms and appear to be effective for both men and women exposed to all varieties of trauma. Effective daily dosage has generally been in the same range as for treatment of depression (e.g., Sertraline 50-200mg, Paroxetine 10-40mg, Fluoxetine 20-80mg, and Fluvoxamine 250-300mg).

When prescribing SSRIs, however, it is important to recognize that although their side-effect profile is relatively benign (compared to most other medications), they sometimes do have undesirable side effects, such as arousal and insomnia, which may be particularly intolerable for PTSD patients. If patients develop insomnia and/or agitation, the next choice is to add trazadone at bedtime. If there are still clinically significant symptoms after an 8-10 week trial of the SSRI at its optimal dose, it is time to go back to the drawing



Post-Traumatic Stress Disorder: Implications for Primary Care

board, try to make sense of the refractory symptoms from a pathophysiological perspective and cautiously consider other classes of drugs. It may be appropriate to request that a psychiatrist with expertise in the treatment of PTSD be involved in the psychopharmacologic management, particularly when symptoms are refractory to standard treatment or when patients have atypical responses to therapy.

Our recommendation is to start treatment with an antiadrenergic agent. Antiadrenergic agents (such as alpha-2 agonists or beta blockers) have received surprisingly little systematic attention in clinical trials, despite overwhelming evidence for adrenergic dysregulation in PTSD. It is useful to prescribe an alpha-2 agonist such as clonidine (0.1 - 0.2 mg 2-3x daily) or guanfacine (1mg 2-3x daily), first. More often than not, such medication will reduce hyperarousal and re-experiencing symptoms. In addition, reduced adrenergic activity often is accompanied by dramatic reductions in dissociative symptoms, even among adults with complex PTSD because of repeated sexual abuse during childhood. The advantage of using clonidine, guanfacine or a beta adrenergic antagonist such as propranolol (10-40 mg 4x daily), is that the clinician can titrate the drug over the course of a week or two. It will be readily apparent (in a much shorter time than with an SSRI) whether this drug will work. When a clonidine responder appears to develop tolerance to the drug, switching to guanfacine (an alpha-2 agonist with a longer half-life) often restores the therapeutic effect.

Other medications that are being utilized frequently for PTSD are nefazadone (Serzone 100-600 mg daily), venlafaxine (Effexor 75-150 mg twice daily) and valproate (Depakote 750-1750 mg daily), all well established as effective antidepressants. There are no published randomized trials supporting the efficacy of any of these drugs, although there are positive open label PTSD trials with nefazadone and valproate.

It is necessary to remember that evidence favoring the use of older antidepressants (e.g., tricyclic antidepressants, (TCAs) and monoamine oxidase inhibitors, (MAOIs)) is stronger than for these newer agents, although clinicians have tended not to prescribe these agents since we have entered the era of SSRI treatment. One should remember, however, that TCA or MAOI treatments remain important options for patients who fail to respond favorably to SSRIs. The dose of these medications is generally the same for PTSD as it is for depression.

It must be emphasized that despite widespread use of benzodiazepines such as diazepam, alprazolam and clonazepam, there is no evidence that such medications are effective against core PTSD re-experiencing and avoidant/numbing symptoms. They are effective as hypnotics and in reducing general anxiety, but such benefits must be weighed carefully against the proven superiority of other agents, as well as the abuse potential of such drugs among some individuals.



Post-Traumatic Stress Disorder: Implications for Primary Care

53

Finally, clinicians have begun to prescribe atypical antipsychotic agents such as risperidone, olanzapine and quetiapine for treatment-refractory PTSD patients who exhibit hyper-vigilance/paranoia, social isolation, agitation/hyperarousal, aggressiveness and frequent flashbacks that have not responded to other treatment. Although these are a few favorable anecdotal reports, clinicians should be cautious with these medications, since their usefulness in PTSD has not been established. It also should be kept in mind that there is no evidence supporting the use of older, conventional antipsychotics (e.g., haloperidol, chlorpromazine or trifluoperazine) in PTSD.



Post-Traumatic Stress Disorder: Implications for Primary Care

TABLE 1
EVIDENCE FOR EFFICACY OF MEDICATIONS IN THE TREATMENT OF PTSD
(Friedman, 2001)

Drug Class	Specific Medication	Daily Dose	Indications	Contraindications
SSRI – Selective Serotonin Re-uptake Inhibitors	Sertraline Paroxetine Fluoxetine Fluvoxamine	50-200 mg 10-40 mg 20-80 mg 250-300 mg	<ul style="list-style-type: none"> • Reduces B, C, & D symptoms • Produces Clinical Global Improvement • Effective Treatment for Depression, Panic Disorder, and Obsessive-Compulsive Disorder • Reduces Associated Symptoms (rage, aggression, impulsivity, suicidal thoughts) 	<ul style="list-style-type: none"> • May produce insomnia, restlessness, nausea, decreased appetite, daytime sedation, nervousness, and anxiety • May produce sexual dysfunction, such as decreased libido, delayed orgasm, or anorgasmia • May produce clinically significant drug interactions when prescribed to people taking MAOIs or other drugs for other medical conditions
Other Serotonergic Antidepressants	Nefazadone Trazadone	100-600 mg 25-500 mg	<ul style="list-style-type: none"> • May reduce B, C, & D symptoms • Trazadone is synergistic with SSRIs & reverses SSRI-induced insomnia • Effective antidepressants: few side effects 	<ul style="list-style-type: none"> • May be too sedating

LEGEND: **B Symptoms:** intrusive recollection
C Symptoms: avoidant/numbing
D Symptoms: hyperarousal

Table continued on next page



Post-Traumatic Stress Disorder: Implications for Primary Care

continued

TABLE 1
EVIDENCE FOR EFFICACY OF MEDICATIONS IN THE TREATMENT OF PTSD
(Friedman, 2001)

Drug Class	Specific Medication	Daily Dose	Indications	Contraindications
MAOI – Monoamine Oxidase Inhibitor	Phenelzine	45-75 mg	<ul style="list-style-type: none"> • Reduces B symptoms • Produces Global Improvement • Effective Antidepressant and Antipanic Agent 	<ul style="list-style-type: none"> • Patients must follow a strict dietary regimen or they may have a dangerous elevation in blood pressure (i.e., a hypertensive crisis) • Contraindicated in patients with alcohol/substance abuse/dependency • May produce insomnia, hypotension, anticholinergic and severe liver toxicity
TCA – Tricyclic Antidepressants	Imipramine Amitriptyline Desipramine	150-300 mg 150-300 mg 150-300 mg	<ul style="list-style-type: none"> • Reduces B symptoms • Produces Global Improvement • Effective Antidepressant and Antipanic Agent 	<ul style="list-style-type: none"> • Anticholinergic side effects (dry mouth, rapid pulse, blurred vision, constipation) • May produce abnormal electrocardiogram • May produce hypotension (low blood pressure), arousal, or sedation
Anti-Adrenergic Agents	Clonidine Propranolol	0.2-0.6 mg 40-160 mg	<ul style="list-style-type: none"> • Reduces B & D symptoms • Reduces B & D symptoms 	<ul style="list-style-type: none"> • May lower blood pressure or slow pulse rate too much • Must use cautiously with patients on hypotensive medications • Propranolol may produce depressive symptoms or psychomotor slowing

LEGEND: **B Symptoms:** intrusive recollection
C Symptoms: avoidant/numbing
D Symptoms: hyperarousal

Table continued on next page



Post-Traumatic Stress Disorder: Implications for Primary Care

continued

TABLE 1
EVIDENCE FOR EFFICACY OF MEDICATIONS IN THE TREATMENT OF PTSD
(Friedman, 2001)

Drug Class	Specific Medication	Daily Dose	Indications	Contraindications
Antianxiety Agents	Alprazolam Clonazepam	0.5-6 mg 1-6 mg	<ul style="list-style-type: none"> • Reduces D symptoms only • Effective Anxiolytics & Antipanic agents 	<ul style="list-style-type: none"> • Should not be prescribed to patients with past or present alcohol/drug abuse/dependency • May exacerbate depressive symptoms
Anticonvulsants	Carbamazepine Valproate	600-1000 mg 750-1750 mg	<ul style="list-style-type: none"> • Effective on B & D symptoms • Effective in Bipolar Affective Disorder • Effective on C & D symptoms • Effective in Bipolar Affective Disorder 	<ul style="list-style-type: none"> • May produce neurological symptoms, low sodium, and blood abnormalities through bone marrow toxicity • May produce gastrointestinal problems and tremor
Conventional Antipsychotics	Thioridazine Clozapine Risperidone	200-800 mg 300-900 mg 4-12 mg	<ul style="list-style-type: none"> • Sedation, hypotension, & anticholinergic affects • Extrapyramidal effects (thioridazine, primaril) 	<ul style="list-style-type: none"> • Possible effectiveness on B & D symptoms • Effective Antipsychotic Agents

LEGEND: **B Symptoms:** intrusive recollection
C Symptoms: avoidant/numbing
D Symptoms: hyperarousal



Post-Traumatic Stress Disorder: Implications for Primary Care

57

Many patients with PTSD receive combined pharmacological and psychotherapeutic treatment. Although there is no empirical evidence that combined treatment is more efficacious than either treatment alone, many clinicians believe this to be the case. Clinical trials just have begun to determine whether there are advantages of combined treatment over monotherapy, and if so, for whom and under what conditions. It is important to keep in mind that individuals with long-standing chronic, severe and debilitating PTSD may not respond favorably to medication (or to psychotherapy).

Importantly, **one of the functions of medication is to make it possible for patients to participate in psychotherapy.** If they are prescribed only to accomplish short-term symptomatic relief, patients may be encouraged to avoid addressing their trauma-related problems.



12 MEDICAL COMPLIANCE/PREPARATION FOR MEDICAL PROCEDURES

The symptoms of PTSD, including re-experiencing the trauma, avoidance of situations associated with the trauma, emotional numbing and hyperarousal, can present as management issues in the medical setting.

There are aspects of the medical setting that may trigger trauma-related symptoms:

- **invasive procedures** (e.g., those performed in primary care, gynecology, ENT, gastroenterology, urology or dental clinics) can potentially trigger a post-traumatic reaction in patients who have experienced sexual trauma, or other invasive traumas (e.g., torture or traumatic injuries)
- pelvic exams, colonoscopies, upper GI endoscopies, barium enema, oral instrumentation and other **procedures that involve placing an instrument into a bodily orifice** may be sufficiently reminiscent of the trauma to evoke a post-traumatic reaction

There are aspects of the medical setting (e.g., including invasive procedures, pelvic exams or use of oral instrumentation) that may trigger trauma-related symptoms.

Although invasive procedures are the most dramatic examples of triggering events occurring in the medical setting, a number of other features in this setting also may evoke trauma reminders, including:

- being touched (even in a usually non-threatening part of the body, e.g., inflating a blood pressure cuff or standing behind the patient to auscultate the lungs)
- the power differential (which can remind the patient of the power differential between the person and his or her assailant)
- being confined in a small enclosed space (e.g., MRI)
- having arms restrained (e.g., for minor surgery)
- removal or absence of clothing
- being in physical pain (e.g., as the result of a procedure, during wound debridement or after a fracture) also may bring back memories of trauma
- if the patient was sedated by an assailant, medications used to treat pain or anxiety that have sedative side effects can remind the patient of the assault



Post-Traumatic Stress Disorder: Implications for Primary Care

In response to these features of the medical setting, trauma survivors may be likely to exhibit the following responses:

Avoidance symptoms, which put the patient at risk of delayed diagnosis and preventable disease progression. A sexual trauma survivor who is having a medical symptom such as blood in the stool may anticipate that an invasive procedure will be required in its evaluation, and that such a procedure will remind him or her of a trauma. To avoid the emotional distress that such procedures would elicit, the patient may be likely to:

- repeatedly cancel appointments,
- avoid telling providers about symptoms, or
- agree to the procedure but then not show up on the day of the appointment.

Dissociative symptoms, which are usually triggered by a strong emotional reaction (i.e., terror, surprise, helplessness, shame or feeling trapped or exposed), can involve a range of phenomena, such as:

- altered awareness or attention (which looks like “spacing out,” or appearing unresponsive),
- flashbacks (the patient may experience herself or himself to be back in the scene of the trauma, and be unaware of her surroundings or of the provider’s presence),
- “out of body” experiences (e.g., feeling unreal, looking down on the scene from above or feeling as if they are not in their body), or
- the assumption of different identities, as is seen in dissociative identity disorder (formerly referred to as multiple personality disorder).

For example, during a pelvic exam, a patient may experience intense feelings of anxiety because she is flooded with memories of her trauma. Her automatic defense against these overwhelming emotions is to dissociate. She may appear unresponsive, she may sob uncontrollably or she may assume a different persona (e.g., speaking in a child’s voice about topics unrelated to the pelvic examination).

Increasing Compliance with Medical Procedures

In addition to knowing about your patient’s history, there are a number of approaches you can take to help the patient successfully complete an invasive procedure with as little emotional distress as possible and decrease the likelihood that the patient will avoid care in the future:



Post-Traumatic Stress Disorder: Implications for Primary Care

60

A. Normalize the patient's concerns

Explain that many of your patients who have had traumatic experiences find that medical procedures can be stressful for them.

B. Reduce the power differential between you and your patient

- Greet the patient in your office (not exam room) while he or she still is fully dressed.
- Give the patient as much control as possible, offering options (e.g., timing of the procedure, type of anesthesia and whether a friend will be present for the procedure).
- Provide health education materials.
- View the patient as an expert about him or herself. Ask what would be most likely to help reduce his or her stress during the exam.
- Ask the patient to predict what will be the most difficult parts of a procedure.
- Take a break, if necessary.

C. Engage in dialogue throughout exam

- Explain everything you do in advance and as you are doing it.
- Listen carefully to any concerns.
- Check in regularly about the patient's level of anxiety.
- Remind the patient why you are doing this exam.

D. Plan ahead

- Allow extra time: Schedule these patients for slower days.
- Be prepared and willing to reschedule the exam, if necessary.
- Use distraction during the procedure.
- Consider using relaxation techniques (though for some trauma survivors this is contraindicated).
- Involve a mental health provider in planning care; the mental health provider can work with patients around identifying specific fears about the procedure and developing coping strategies that will help them get through the procedure.



Post-Traumatic Stress Disorder: Implications for Primary Care

61

E. Respect the patient's wishes

- If the competent patient declines a procedure, respect his or her wishes (but explore specific concerns to see if misunderstandings can be resolved and offer the option of having the procedure at a later date).
- **If the patient asks that an examination be stopped, do so immediately.**
- While a patient may need encouragement and support in order to be able to go through with a procedure, the patient should not be coerced; to do so would put him or her at risk for retraumatization.

If Symptoms do Occur

Despite your best efforts to avoid it, post-traumatic symptoms may occur during an exam. For example, the patient may become very anxious or even develop dissociative symptoms. The following techniques may be helpful in addressing trauma-related symptoms that arise acutely while performing a medical procedure:

- Speak in a calm, matter-of-fact voice and avoid sudden movements.
- Reassure your patient that everything is okay.
- Continue to explain what you are doing.
- If at all possible, stop the procedure.
- Ask (or remind) the patient where he or she is right now.
- Re-ground the patient: Remind him or her that you are in a doctor's office, that he or she is safe and that he or she is having a medical procedure.
- Offer the patient a drink of water, an extra gown, or a warm or cold wash cloth for the face – anything that will make the patient feel more like his or her usual self.
- Provide a change of environment (moving to a different room).

As patients have to assume a larger role in helping to ensure their own health care, issues of medical compliance are more salient. While it may seem fairly simple, these self-care skills are quite complex, and can be extremely challenging for the patient with a history of trauma. Therefore, any assistance and sensitivity on the part of the primary care provider can help to reinforce an effective and positive working relationship with their primary care provider.



13 THE PATIENT-PROVIDER RELATIONSHIP: SETTING BOUNDARIES

When caring for a patient with PTSD, complexities can arise in the patient-provider relationship. As stated at the beginning of this document, the patient with a trauma history is more likely to have a number of interpersonal characteristics that can impede patient-provider relations, including:

- irritability and hostility
- avoidance
- chronically poor self-care health habits
- confusion or poor memory when being interviewed about health
- stoicism and reluctance to admit to health problems
- extreme neediness and/or demands

Boundaries can be defined as the appropriate interpersonal distance (especially emotional distance) between patients and health care providers.

It is important for the primary care provider to realize that **the veteran's stagnation, regression and/or negative behavior in his or her progress or treatment is not necessarily a negative reflection on the provider or staff**, and to make every attempt to understand these behaviors in the context of the patient's trauma history.

One of the ways that a primary care provider can more effectively manage patients with a trauma history is to maintain healthy boundaries. Boundaries can be defined as the appropriate interpersonal distance (especially emotional distance) between patients and health care providers.

Some brief vignettes will help to illustrate how boundary crossings can enter into the patient-provider relationship:

Ms. A. is a 28-year-old woman with a history of military and childhood sexual trauma who calls the receptionist, begging to be seen for a possible urinary tract infection. After checking with Dr. B., the receptionist schedules Ms A. as an add-on for the last appointment of the day. Ms A. arrives 25 minutes late for the appointment, just as Dr. B. is packing up to leave for the day. Ms. A. says she had trouble getting away from work. Dr. B. says he



Post-Traumatic Stress Disorder: Implications for Primary Care

63

has a reservation to take his girlfriend to a restaurant right after work, but agrees to see Ms A. Ms A. thanks him for seeing her, noting that his girlfriend is lucky to have caught such a handsome man, and laughingly saying, “I hope your girlfriend moves to another state so I’ll have less competition.” Dr B. feels flattered and a bit titillated by the attention, but also embarrassed and somewhat guilty. After taking a history, Dr. B. suspects that vaginitis is more likely than cystitis. All staff members have left the clinic for the day, and no chaperone is available.

Mr. C. is a 67-year-old Korean veteran who has been seeing Dr. D. for his COPD symptoms once a month for the past two years. Mr. C. was verbally and physically abused as a child and has PTSD. Dr D. is concerned about Mr. C.’s refractory COPD symptoms and refers him to a pulmonologist. Because the pulmonary clinic visit will be in three weeks, Dr D. schedules the next visit in his own office for seven weeks, slightly longer than his usual follow-up interval. When Mr. C. returns for his follow-up visit with Dr D., he brings a gift – a silk shirt. Dr D. protests over the expensive gift, but Mr. C. says, “It’s the least I can do for you. You do so much for me. You are the best doctor I have ever had.” Mr. C. then tells Dr D. about his visit with the pulmonologist. He describes the pulmonologist as uncaring and abrupt and he repeats verbatim his entire interchange with the pulmonologist. With the silk shirt sitting in front of him, Dr D. listens, feeling uncomfortable. Mr. C.’s COPD symptoms are worse than ever.

Dr. E. is feeling very low. She is going through a bitter divorce and struggling to repay her medical school loans. Ms. F., a 48-year-old woman with fibromyalgia, chronic migraines, irritable bowel syndrome and PTSD related to childhood sexual trauma and sexual assault in military service, has come in for a routine follow-up visit. Ms. F. says to the doctor, “Beth, you look tired today. How are things going at home?” Dr. E. says, “Terrible. My ex is putting me through a lot of grief, and on top of that I don’t know how I am going to pay my medical school loans.” Ms. F. says, “Oh, I’m so sorry to hear that. Medical school should be subsidized, the way it is in other countries.” This conversation continues for 10 of the 15 minutes allotted for the visit, after which Dr. E. turns the focus to Ms. F.’s pain. Ms. F. breaks down in tears, saying, “Oh, it has been horrible. Nothing works for my headaches. You have to do something for me!” It takes 10 minutes for Dr. E. to help Ms. F. feel calm enough to be able to describe her symptoms, but she continues to seem very needy. The visit runs 15 minutes beyond the scheduled time, keeping other patients waiting.

Mr. G. is an 85-year-old WWII veteran who was a POW in the Philippines, where his captors forcibly and painfully inserted tubes into his rectum to check for parasites. He sustained other types of torture, as well. Dr. H. recommends a colonoscopy for Mr. G. because routine testing detected occult fecal blood. Mr. G. begins telling Dr H. off-color jokes about sodomy.



Post-Traumatic Stress Disorder: Implications for Primary Care

64

These cases illustrate common situations in which a clinician might cross a boundary, such as:

1. **Being a “friend.”** The patient may ask the provider to disclose personal information (“What kind of work does your husband do?”), raise issues unrelated to his/her medical care (“I couldn’t believe it when Jones missed that fly in the ball game last night!”), call the physician by his/her first name or give the physician gifts. By responding to the patient’s familiarities or initiating similar familiarities him/herself (“I was up late last night with my sick child and I’m really tired today.”), the clinician communicates to the patient that he/she is indeed the patient’s “friend.” At the extreme, the roles can reverse, and the patient can begin to play the role of caregiver to the clinician (“Doc, you look tired, you should really go on a vacation.”).

Why is this a problem?

A hazard of this is that patients may become frightened about whether their medical problems are going to be addressed and they may become needy and anxious. The lack of distance between patient and provider may make the patient begin to feel unsafe, potentially leading the patient to miss scheduled visits in an effort to reestablish distance from the clinician. Patients who have experienced sexual or other trauma in which their own personal boundaries have been violated may be particularly vulnerable to these problems. Physicians, too, are at risk. If they start to see the patient as a friend, they may lose objectivity in the patient’s care, perhaps not following standard procedures (for example, being reluctant to perform a rectal examination when the patient mentions having had blood in his/her stool). Clinicians may worry about the care they are providing to the patient or even face malpractice litigation around nonstandard practices.

What could a provider say?

Health care providers need to make it clear that they have a professional (not personal) relationship with the patient, while at the same time maintaining a caring, empathic stance. This is a difficult balance to strike. Examples of things a provider might say are:

- *“Thank you very much for your concern for my family, but my priority is to care for YOU. Let’s talk about your symptoms.”*
- *“I am concerned that if we talk a lot about the ball game we won’t do justice to your medical issues. Let’s move on to those.”*
- *“I appreciate your generosity in wanting to give me a gift, but my professional society urges me not to accept gifts from patients. It is my pleasure to always give you the best care that I can and you never need to give me any gift to assure that I will do so.”*



Post-Traumatic Stress Disorder: Implications for Primary Care

65

Small boundary crossings early in a patient-provider relationship can gradually escalate over time, leading patient and provider down a slippery slope towards increasingly serious boundary violations.

2. **Being a “rescuer.”** The needy patient may want the physician to deviate from standard practice (e.g., seeing the patient after hours, extending the clinic visit longer than the scheduled length, advising the patient in the hallway or at a social event or asking for a treatment that the physician does not feel comfortable prescribing). Having been drawn to medicine by a desire to help others, the clinician may want to play the role of rescuer. Clinicians can be particularly susceptible to idealization by the patient (“You’re the only one who can help me and the only one I can trust.”).

Why is this a problem?

By deviating from standard practice to address the patient’s needs, clinicians communicate that they are indeed “better than the rest.” It is inevitable that a time will come when the clinician fails to achieve this unrealistic, super-human standard; when that happens, the patient is likely to feel betrayed and may retaliate against the clinician or terminate the relationship. The clinician, too, may feel betrayed (“I went over and above for him, and this is how he treats me?”), and abandon the patient or retaliate in some other way. The provider also may experience burnout, at which point he/she does neither his patient nor himself any good.

What could a provider say?

While clinicians may feel they are “letting the patient down” by setting limits, they are helping their patients and preventing unhealthy burnout in themselves.

- *“It sounds like there are several issues that we need to address. Because we only have 20 minutes for our visit today, we will not be able to address them all in one visit. Let’s identify the two highest priority items that you want to be sure we cover today, and then schedule a follow-up visit in a short interval so we can continue working through this list of important issues.”*
- *“While standing here in the hallway, I am not going to be able to evaluate this new symptom of yours properly. Can you please call the clinic clerk to set up a time for us to discuss it by phone this afternoon? During that conversation, we can determine how soon you should come in to the office to be evaluated for this problem.”*
- *“Thank you for suggesting that I am the best doctor in town. I try very hard to do a good job for all of my patients. However, no one is perfect, and I am sure there will*



Post-Traumatic Stress Disorder: Implications for Primary Care

66

be times when I do not meet your expectations. I hope that you will let me know when this happens so we can keep our communications open and honest.”

3. **Seeking a “romantic attachment.”** The patient may exhibit seductive behaviors toward the physician. Conversely, a clinician may experience sexual feelings in relation to a patient. If clinicians have their own issues, they may act upon such feelings and initiate seductive behaviors toward the patient.

Why is this a problem?

Establishing a romantic relationship with a patient is a taboo in medicine. Because of the power differential in the patient-provider relationship, the patient is at great risk of being harmed, potentially repeating the pattern of exploitation she experienced in the past (e.g., as an incest victim in childhood). The physician is at risk of loss of licensure and loss of standing in the medical community, as well as personal feelings of worry and shame.

What could a provider say?

- *“My code of ethics does not allow me to enter into a romantic relationship with a patient. It is a very strict rule. However, I would like to continue working with you professionally around your medical problems. Will you be comfortable with that?”*

While minor boundary crossings such as discussing last night’s ball game may be appropriate (e.g., to help the patient relax and establish a connection with the patient), a careful balance must be struck when caring for patients who have particular difficulty with interpreting interpersonal boundaries accurately. Small boundary crossings early in a patient-provider relationship can gradually escalate over time, leading patient and provider down a slippery slope towards increasingly serious boundary violations.

Why Do Patients and Providers Cross Boundaries?

A person’s response to another person is often shaped by earlier life experiences. The dynamics of adult relationships are often modeled upon interaction styles and coping mechanisms learned in childhood. For example:

- A clinician whose mother was a “complainer” may have learned to “tune her out.” When he sees a patient of a similar age who is having several active symptoms, he could fall back upon learned coping responses and “tune out” the patient, as well.
- Similarly, a man who was a prisoner of war may have learned that the only way to escape torture was to flatter his captors and seek to befriend them. In an encounter with



Post-Traumatic Stress Disorder: Implications for Primary Care

67

a medical provider (who, like his captors, is in a position of power and who may perform procedures that hurt or frighten him), he may turn to similar coping mechanisms, seeking to flatter or befriend the provider.

- A woman who was a victim of incest by her father in childhood may have found that the only way to receive positive attention from her father when she was feeling sad and needy was to respond to his advances. Her seductive behaviors in a visit with a medical provider may reflect a coping mechanism, the only way she knows to communicate her need for help.

It is helpful to remember that the patient is coping in the only way he/she knows how, and needs the clinician's help (and possibly a therapist's help) to begin to learn new patterns of interaction.

Boundary crossings by patients and by providers are frequently unconscious and often are motivated by these learned styles of interaction. Such behaviors may frustrate, perplex or anger clinicians. However, it is helpful to remember that the patient is coping in the only way he/she knows how, and needs the clinician's help (and possibly a therapist's help) to begin to learn new patterns of interaction.

What can Clinicians do to Prevent Harmful Boundary Crossings?

- **Be on the lookout for them.** Just realizing that boundary crossings occur and can be harmful makes clinicians more aware of them. Ask yourself, "Do I have strong feelings about this patient?" Such feelings could include pride about being able to provide "better" care than anyone else, anxiety about the patient's welfare, frustration or a sense of being overwhelmed whenever seeing the patient or sexual attraction toward the patient. Feelings like these are clues that boundary crossings could be occurring, although they also can occur in the absence of boundary crossings.
- **Seek permission before touching the patient,** even for routine elements of the physical examination.
- **Communicate the professional nature of the relationship** (e.g., through use of surnames, use of chaperones during sensitive examinations and avoidance of self-disclosure).
- **Set limits up front.** Explain standard protocol to the patient, and adhere to it. These explanations need to be approached empathically and non-judgmentally, but directly. The ideal is to establish ground rules early in a relationship so that the patient has appropriate expectations.



Post-Traumatic Stress Disorder: Implications for Primary Care

68

- **Re-negotiate expectations.** Often providers find they have failed to set limits early in a relationship and feel trapped by an unhealthy pattern of patient-provider interactions (such as clinic visits that chronically run over the scheduled time). While it is harder to reverse course than to establish a positive path from the outset, it is still feasible to get back on track. Upon recognizing that an undesirable pattern of interactions is occurring, the following may be helpful:
 - meet with another clinician(s) (who is not entangled in the relationship and will thus be more objective) to review the problem and brainstorm about what can be done,
 - explicitly discuss the issue with the patient (ideally letting the patient know in advance that this will be an agenda item for the next visit), and re-negotiate how future interactions will occur. The conclusions of that discussion can be written down for the patient to assure that a true mutual understanding has been reached, and
 - for more refractory problems (e.g., a patient frequently calling in for opioid renewals between scheduled visits), it may be helpful to have a written “contract” with the patient that is signed by both patient and provider.
- **Work with the patient’s mental health provider.** The mental health expert can help clinicians understand their own feelings that may be interfering with a therapeutic patient-provider relationship. The mental health provider also may be able to help patients learn new coping styles that will assist them in establishing healthy interpersonal distance in professional medical interactions, and in their personal lives, as well (Gabbard & Nadelson, 1995; Vaillant, Sobowale, & McArthur, 1972).



14 SPECIAL CONSIDERATIONS: THE COMPENSATION-SEEKING VETERAN WITH PTSD

More than one third of veterans receiving care from VA medical facilities have disabilities related to their military service, and these “service-connected” veterans are given priority for care over low-income veterans who are not service-connected. Perhaps as many as 80% of veterans with PTSD who use VA services are either service-connected for PTSD or are in the process of applying for service-connected PTSD (Fontana & Rosenheck, 1998).

Since normal lifespan events, such as retirement or major illness, can either trigger quiescent PTSD or exacerbate existing PTSD, it is likely that, as the veteran population ages, more and more veterans with newly diagnosed PTSD will come into contact with primary care providers.

Yet, despite the fact that over 200,000 veterans have applied for service-related PTSD disability benefits since 1980 (Murdoch, O’Brien, Hodges, Hunt, Lehman, Cowper, Vessey, & Fox, 1997), it is estimated that only about 40% of potentially eligible Vietnam veterans, for example, have applied for compensation or VA medical treatment for PTSD, and only 10-20% have been service-connected for PTSD (Murdoch, et al., 1997). For some veterans, service connection represents the difference between access and no access to health care. In other cases, because service connection sometimes carries with it a degree of monetary compensation, it also may mean the difference between veterans meeting or not meeting basic personal needs, such as food or shelter (Rosenheck, Dausey, Frisman, & Kaspro, 2000). Compensation can be paid to veterans any time after their military service, if three conditions are satisfied:

- a traumatic event occurred during military service, and
- a compensable mental or physical disorder is diagnosed, and
- a credible link between the disorder and the traumatic event is established.

Primary care providers need to be aware of some of the issues involved in becoming service-connected for PTSD, in order to help veterans access care and/or compensation. Also, since normal lifespan events, such as retirement or major illness, can either trigger quiescent PTSD or exacerbate existing symptoms (Archibald, Long, Miller, & Tuddenham, 1962; Elder & Clipp, 1989; Lipton & Schaffer, 1986), it is likely that, as the veteran population ages, more veterans with newly diagnosed PTSD will come into contact with



Post-Traumatic Stress Disorder: Implications for Primary Care

primary care practitioners, and many of these veterans will at some point elect to seek compensation for their disablement.

For purposes of compensation for service-related PTSD, it does not matter if the veteran was in combat and it does not necessarily matter if the trauma itself occurred during military service. For example, repressed childhood memories of abuse triggered by a drill instructor in boot camp could reactivate a veteran's latent PTSD or aggravate a pre-existing condition. In either case, the veteran might be eligible for VA compensation.

Most VA's have at least one person specially trained in dealing sensitively with the concerns and discomforts veterans commonly experience during the Compensation and Pension (C&P) process. VA's also are mandated to have at least one women's veteran coordinator available to assist veterans in the particularities of developing C&P claims pertaining to military-related sexual trauma. The women's veteran coordinator can assist men with sexual trauma claims, as well as women. To access these services or to initiate a claim, veterans should be advised to either contact their local Veterans Service Organization or their local veterans coordinator.

While VA compensation can help trauma survivors cope with a host of problems, including difficulty finding or keeping a job or losing wages because of absenteeism, only a minority of veterans cites financial concerns as the primary reason for seeking service connection for PTSD. Instead, for many veterans, service connection offers external validation of their disablement, heroism, service to their country, tribulations while in the service or all of the above. Service connection for PTSD, therefore, may offer therapeutic value to veterans above and beyond any cash they receive. Unfortunately, by the same token, failure to receive service connection may be psychiatrically devastating to some veterans.

The primary care provider can assist his or her patient's quest for compensation by carefully documenting in the medical chart any signs, symptoms and behaviors that might support (or not support, if appropriate) a diagnosis of PTSD.

The rates at which service connection for PTSD is granted to veterans vary dramatically across the country (Murdoch et al., 1997) and may, in part, be related to the frequency with which clinicians make the diagnosis in different veteran groups (Murdoch, Halek, Fortier, van Ryn, & Hodges, 2001). All veterans who seek service connection for PTSD must undergo a C&P exam in which a qualified clinician determines whether or not the veteran has PTSD and whether or not the PTSD was caused or aggravated by something that



Post-Traumatic Stress Disorder: Implications for Primary Care

occurred during the service. To ensure thoroughness, the ideal C&P exam is thought to take about two hours. However, not all exams achieve this ideal. While the primary care provider's opinion cannot, and should not, substitute for that of a C&P examiner for purposes of compensation, the primary care provider can assist his or her patient's quest for compensation by carefully documenting in the medical chart any signs, symptoms and behaviors that might support (or not support, if appropriate) a diagnosis of PTSD.

Examples of medical signs that should be documented include:

- hypertension
- high resting pulse (Keane, Kolb, Kaloupek, Orr, Blanchard, Thomas, Hsieh, & Lavori, 1998; McEwen, 1998)
- scars, injuries and old fractures that might support a history of trauma
- diminished hearing (which may support a history of shelling)
- neuropathies consistent with trauma or malnutrition (Venn & Guest, 1991)

Any symptoms concordant with PTSD should be documented, of course, as well as any historical information that the patient offers about his or her trauma. Attention to the veteran's social and occupational capacity can help establish his or her level of disability. Primary care providers should be aware that older veterans, especially former prisoners of war, may have been socialized to minimize or not report feelings of distress (Lipton & Schaffer, 1986). However, they often will admit to sleeping difficulties (Engdahl, Eberly, Hurwitz, Mahowald, & Blake, 2000) or to nightmares. Other behavior that might support a diagnosis of PTSD and that should be documented includes non-compliance with therapies. Such non-compliance may indicate difficulties with memory, a lack of self-worth or possibly, problems with authority. Their experiences in reporting an assault to military authorities has resulted in some women veterans being suspicious of authority figures (including physicians). The avoidance of certain exams or tests (e.g., rectal exams, endoscopies or pelvic exams) also should be documented, because they may represent reminders of the victim's original trauma.

Even when the veteran is successful in his or her pursuit of PTSD disability benefits, the process of obtaining such benefits can be extremely stressful (e.g., Eldridge, 1991). As in criminal proceedings, victims must recount their traumatic experiences to multiple people, all of whom serve in a forensic capacity. This repeated revisiting of the veteran's traumatic experiences in itself may exacerbate PTSD and lead to acute decompensation. The patient may find it particularly devastating, if the claim is denied. Primary care providers should counsel their patients about this possibility and should encourage them to establish a stable,



Post-Traumatic Stress Disorder: Implications for Primary Care

72

therapeutic relationship with a mental health provider before the veteran pursues a disability claim. Since veterans' physical symptoms also may flare during this time because of stress, primary care providers should consider offering more frequent follow-up visits during the veteran's C&P process.



15 MODELS OF CARE

The delivery of mental health services in primary care settings has multiple advantages. One of the most important recognized goals of mental health care integration is to provide veterans with comprehensive and continuous care. The VA Mental Health Strategic Healthcare Group (1997) concluded that diagnosing and treating mental health and behavioral problems in medical patients can result in significant cost savings. They noted that mental health staffs in primary care frequently offer the following services:

- assistance with diagnosis of behavioral disorders and symptoms, which can affect health status, adaptation to illness and compliance with treatment regimens.
- treatment services such as psychological methods of pain management, cardiac risk factor education, behavioral methods of smoking cessation and patient and family education to enhance coping with chronic illness.

Mental health in primary care not only includes behavioral medicine interventions, but also may involve screening, diagnosis, treatment and crisis intervention for serious mental illness, such as PTSD.

There are **four major models** of integrated mental health/primary care:

1. Primary Care Behavioral Health Care Integrated Team

(Strosahl, 1998)

In this approach, mental health professions see patients on-site in the primary care setting, co-managing them with primary care providers. They also provide direct consultative services to primary care providers. Services are delivered as a “first line” intervention for primary care patients who need more concentrated behavioral health services, but who can be managed in a primary care setting. Simple, effective and diagnosis-specific treatments are provided, which may include brief interventions (cognitive-behavioral, psycho-educational and pharmacological). If a patient fails to respond to this level of intervention, or obviously needs specialized treatment, the patient is referred to the specialty mental health system.



2. Dual Team Membership

In this model, mental health providers are not located within the primary care settings, but may serve as liaisons on primary care teams, where patients with mental health problems have membership on both primary care and mental health teams.

3. Mental Health Participation in Medical Primary Care Teams

Mental health staff serve as regular members on medical primary care teams, where they provide diagnosis and screening of behavioral disorders and symptoms that may affect physical health, treatment for behavioral disorders and health risk behaviors, behavioral medicine interventions and other supportive activities.

4. Traditional Consultation and Liaison

Medical staff can request a mental health consultation from a specialist with knowledge of diagnoses and medical syndromes. The patient often is referred to specialty mental health when diagnosis is established.

Advantages of Integrating Mental Health Care for PTSD in Primary Care Settings

There are several rationales for increasing mental health services for PTSD in primary care settings. Recent research has found that 70% of all primary care visits have a psychosocial component. In addition, about two-thirds of psychoactive agents are prescribed by a primary care provider; even more for antidepressant agents. The benefits of integrating primary care and mental health may include the following:

- improved screening of all mental health conditions,
- improved primary care provider skills in identifying and prescribing medication,
- increased patient adherence to medication,
- reduced premature drop-out rates from treatment regimens,
- improved self-management skills,
- better clinical outcomes than treatment in separate primary care or mental health settings, and
- improved provider and veteran satisfaction with services.



Post-Traumatic Stress Disorder: Implications for Primary Care

75

The primary goals of an integrated behavioral health care model are for the mental health professional to act as an on-site consultant to the health care team. The mental health professional supports the primary care provider's decision-making on mental health issues and teaches the team "core" behavioral health skills. Patients are educated in self-management skills that are practiced between brief sessions. Finally, patients who are most "at risk" are monitored by both primary care and mental health for possible referral to specialty mental health settings.

What if my facility does not have an Integrated Mental Health Model?

All VA facilities have ongoing Continuous Quality Improvement programs. These programs seek the input of primary care providers (and others) to identify best practices that will enhance services for veterans. Primary care providers are very familiar with the types of patients they typically see and with logistical issues specific to providing care at their own facilities. Once aware of some of the models for providing integrated care to patients with PTSD that are used at other facilities, they are in a position to recommend enhancements to their local health care delivery systems consistent with the needs of their patients.



V COMMONLY ASKED QUESTIONS ABOUT PTSD

With less and less time allotted to my patient visits, why should screening for PTSD be a priority? If there is not enough time to deal with major medical problems (such as DM, CHF or Ischemic Heart Disease), how can I justify sacrificing time for these medical entities to deal with PTSD?

Approximately 20% of VA ambulatory care outpatients screen positive for PTSD. If a VA ambulatory care outpatient has been exposed to trauma, he is three times more likely to be diagnosed with depression and two times more likely to be diagnosed with an alcohol disorder. Patients with PTSD experience a degree of impairment similar to that observed in patients suffering from major depression. PTSD is associated with significant problems in living (for example, marital problems or suicide) and with high levels of utilization of medical services. In addition, life-threatening medical conditions such as MI, severe burns, severe injuries and cancer can cause or exacerbate PTSD. In turn, untreated PTSD can impair recovery from these conditions. Finally, traumatic experiences and traumatic stress bring about hormonal, neurochemical, immune functioning and autonomic nervous system changes which can affect an individual's physical health. People with PTSD tend to be more susceptible to hypertension and atherosclerotic heart disease, abnormalities in thyroid and other hormone functions, infections and immunologic disorders, problems with pain perception, pain tolerance and chronic pain syndromes. (Hankin et al., 1999; Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar, & Weiss, 1990; Stein, McQuaid, Pedrelli, Lenox, & McCahill, 2000; Fifer, Mathias, Patrick, Mazonson, Lubeck, & Buesching, 1999).

Are there one or two quick questions I can ask to screen for PTSD without doing a formal assessment?

The Primary Care PTSD Screen below is one example of a brief, four-question screen for PTSD:

“Have you ever had an experience that was so frightening, horrible or upsetting that, in the past month, you...

- have had nightmares about it or thought about it when you did not want to?”
- tried hard not to think about it or went out of your way to avoid situations that reminded you of it?”
- were constantly on guard, watchful or easily startled?”
- felt numb or detached from others, activities or your surroundings?”



Post-Traumatic Stress Disorder: Implications for Primary Care

77

Response to the PC-PTSD should be considered “positive” if a patient endorses *any* two items or the single hyper-arousal (i.e., “on guard, watchful or easily startled”) item. A positive response to the screen does not necessarily indicate that a patient has post-traumatic stress disorder, but it does mean that a patient may have PTSD or trauma-related problems and that further investigation of trauma symptoms by a mental health professional may be warranted.

How often should we screen for PTSD?

Screening for PTSD should be a regular occurrence in the primary care setting, as symptoms are cyclical for some individuals and may be “triggered” by events such as personal trauma anniversaries (e.g., anniversary of Khe Sanh) or news in the media (e.g., peace-keeping mission coverage or “Saving Private Ryan”). All new patients probably should be routinely screened, with screening on an annual or semi-annual basis thereafter.

Most of my patients refuse to accept any mental health diagnosis. What do I do if I recognize potential PTSD in a patient, but they refuse referral to mental health?

Many patients are reluctant to participate in mental health treatment. Common reasons include discomfort with the idea of seeing a psychologist or psychiatrist, perceived stigma associated with treatment, a lack of confidence in the helpfulness of counseling or a reluctance to open up old emotional wounds. Faced with this situation, the primary practitioner can do several things (all of which can serve to raise the likelihood of acceptance of a referral):

- Suggest an evaluation, rather than treatment. Sometimes, it is useful to simply suggest that the patient meet with a mental health professional to learn more about post-traumatic stress, ask questions and consider together whether more contacts will be useful.
- Normalize the idea of treatment. Explain that treatment involves common sense activities that include learning more about PTSD, finding and practicing ways of coping with trauma-related symptoms and problems, taking steps to improve relationships with family and friends and making contact with other veterans who experience similar problems.
- Give the patient educational materials (see Appendix C) that describe PTSD and its common co-morbid conditions (e.g., depression or substance abuse), treatment for PTSD and coping with PTSD. Sometimes he or she will read the materials at a later time and begin to think more carefully about participation in treatment.
- Give information on different ways the veteran can seek assistance, such as the closest Vet Center, online resources, and local community, spiritual and mental health resources other than the VA.



Post-Traumatic Stress Disorder: Implications for Primary Care

- Consider involving the veteran’s spouse or partner in the discussion, with the veteran’s permission, to help clarify the impact of PTSD on others in the veteran’s life and thereby increase motivation to change.
- Make sure to follow up on the issue in the next appointment and keep track of the veteran’s progress with respect to PTSD.

Do patients with PTSD have higher rates of mental illness and alcoholism/drug addiction?

The prevalence of co-morbid psychiatric conditions has been investigated in a number of traumatized groups with PTSD, and these studies have found that 50% to 90% of individuals with chronic PTSD also meet diagnostic criteria for another psychiatric disorder. In the National Co-morbidity Survey, 88% of men and 79% of women with PTSD met criteria for another psychiatric disorder. The National Vietnam Veterans Readjustment Study found that virtually all Vietnam veterans with PTSD had met the criteria for one or more psychiatric disorders at some time during their lives and half were characterized by a current co-morbid disorder. The most commonly co-occurring disorders from these two studies are summarized in the table below (Kessler et al., 1995; Kulka et al., 1990).

Gender	Disorder	Civilians (%)	Vietnam Veterans (%)	
			Lifetime	Current
Males	Alcohol abuse/dependence	51.9	75	20
	Major Depressive Episode	47.9	20	16
	Conduct Disorder	43.3		
	Drug Abuse/Dependence	34.5		
	Generalized Anxiety Disorder	44	20	
Females	Major Depressive Episode	48.5	42	23
	Simple Phobia	29		
	Social Phobia	28.4		
	Alcohol Abuse/Dependence	27.9		
	Generalized Anxiety Disorder	38	20	
	Dysthymic Disorder	33		



Post-Traumatic Stress Disorder: Implications for Primary Care

79

There is now sizeable literature showing that combat-related PTSD is associated with increased rates of substance use disorders. For example, in the National Vietnam Veterans Readjustment Study, it was found that 73% of male Vietnam veterans who met diagnostic criteria for PTSD also qualified for a lifetime diagnosis of alcohol abuse or dependence (15% for lifetime drug abuse); the prevalence rate for current alcohol disorder was 20%. Female Vietnam veterans with PTSD showed a lifetime rate of 29 percent for alcohol disorders, higher than those without PTSD; 10% of women veterans with current PTSD had a current alcohol use disorder, compared to less than 2% of women without PTSD. Trauma exposure also has been linked to substance abuse in some research; in a national study of the health status of women veterans seeking ambulatory care, it was found that those who reported being sexually assaulted while in the military were twice as likely to screen positive for symptoms of current alcohol abuse than those who did not. Finally, research also suggests combat-related PTSD is associated with increased nicotine use (Beckham, Roodman, Shipley, Hertzberg, Cunha, Kudler, Levin, Rose, & Fairbank, 1995).

In the National Co-morbidity Survey, PTSD was found to be primary more often than not with respect to co-morbid affective disorders and substance use disorders. Current evidence also suggests that while trauma exposure can lead to PTSD, exposure also can precipitate other psychiatric disorders, the most common of which are depression and panic disorder (Kulka et al., 1990; Kessler et al., 1995).

Is there an algorithm I can use to distinguish PTSD from other mental health disorders, such as other anxiety, panic, depressive or bipolar disorders?

PTSD very often co-occurs with other mental health problems, especially anxiety disorders and depression, so it should be expected that patients will have a variety of symptoms that are not specific to PTSD. However, several of the hallmark symptoms of PTSD – intrusive thoughts related to a traumatic experience, nightmares or exaggerated startle response – are less common in other disorders and strongly suggest a possible problem related to post-traumatic stress.

Are patients with PTSD as much at risk for suicide as patients who are depressed?

A high proportion of veterans with PTSD report a history of suicidal ideation and a diagnosis of PTSD does carry an increased risk for suicide. In a study of 703 patients from a general medical outpatient clinic at a VA hospital, 7.3 percent of the patients were found to have suicidal ideation. The risk was increased twelvefold in those patients with subjectively fair or poor mental health, sevenfold in the patients with a history of mental health treatment, and fourfold in the patients with fair or poor perceived physical health. When major depression was controlled for, anxiety and substance abuse disorders continued to



Post-Traumatic Stress Disorder: Implications for Primary Care

80

show an association with suicidal ideation. Screening patients for PTSD, other anxiety disorders and drug abuse, as well as depression, gives a more comprehensive picture of risk factors for suicidality and may help prevent suicide and suicide attempts. (Lish et al., 1996). **Patients with PTSD should be explicitly screened for suicidal ideation.**

How can I distinguish between PTSD and a reactive depression (say, from loss of a job)? Does there have to be a potential perception of threat to life for a patient to develop PTSD?

PTSD only is diagnosed when a veteran has been exposed to a traumatic event, which by definition must be an event in which both of the following were present:

- (1) the person experienced, witnessed or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and
- (2) the person's response involved intense fear, helplessness or horror.

Events most commonly recognized to be capable of causing PTSD include (but are not limited to):

- combat
- childhood and adult physical or sexual abuse or assault (including domestic violence and elder abuse)
- street violence
- motor vehicle or industrial accident
- natural or man-made disaster
- life-threatening medical illnesses (e.g., cancer) or procedures (e.g., bone marrow transplantation)
- sudden unexpected bereavement

Note that such events do not necessarily need to be directly experienced; in some cases, witnessing such events may help cause PTSD. Events such as divorce, job loss, bankruptcy and so on may be associated with mental health problems and some of the symptoms of PTSD, but they are not generally considered "traumatic."



Post-Traumatic Stress Disorder: Implications for Primary Care

What types of military/war-related events lead to PTSD?

Severe trauma with high levels of combat, extended combat, participation in atrocities, physical loss of functioning, loss of fellow soldiers/friends and a feeling of betrayal (e.g., by country, military or commanding officer) all are more likely to produce PTSD. An unwelcoming or unsupportive environment upon homecoming also is related to higher rates of PTSD.

- Severity (“dose”) of the trauma is a good predictor of PTSD – the greater the magnitude of trauma exposure, the greater the likelihood that an individual will develop PTSD.
- Nature of the trauma – Interpersonal violence (e.g., rape, physical attack, torture or war-zone trauma) in which there is a human perpetrator is more likely to produce PTSD than an impersonal event such as an accident or natural disaster.
- Betrayal – If the trauma is marked by a sense of betrayal, it is more likely to produce PTSD than when the trauma is not accompanied by this sense.
- Participation in atrocities (either as a perpetrator or witness) has been shown to be a risk factor in Vietnam and other military veterans.
- Poor social support following the trauma is related to increased risk of PTSD.

Female Vietnam era veterans have been shown to have higher exposure to traumatic stress via sexual assault than males while serving on active duty. In a sample of 327 female veterans (Fontana & Rosenheck, 1998), 63% reported experiences of physical sexual harassment during military service and 43% reported rape or attempted rape. Both duty-related stress and sexual assault were found to contribute separately and significantly to the development of PTSD. Sexual assault was found to be almost four times as influential in the development of PTSD as duty-related stress.

What percentage of individuals undergoing a given war experience have PTSD as a result of their battle trauma?

The National Vietnam Veterans Readjustment Study (NVVRS; Kulka et al., 1990) estimated that more than half of all male Vietnam veterans and almost half of all female Vietnam veterans have experienced “clinically serious stress reaction symptoms (PTSD or subclinical PTSD)” at some point in their lives. Table 1 summarizes specific figures for PTSD (by DSM-III-R criteria) in subsets of this population. It should be noted that the higher rates of PTSD for ethnic minorities reflect in part greater exposure to combat. The Matsunaga Vietnam Veterans Project included prevalence rates for Native Americans, Native



Post-Traumatic Stress Disorder: Implications for Primary Care

Hawaiians and Japanese Americans. These figures are included in the table below (National Center for Alaskan and Native Americans & National Center for PTSD, 1997).

TABLE 3
PTSD PREVALENCE IN THE NVVRS AND MATSUNAGA SAMPLES

	Lifetime %	Current %
Vietnam Veterans	30	
Males		15.2
Females		8.5
White/other		13.7
African American		20.6
Hispanic		27.9
Southwest Plains Indians		26.8
Northern Plains Indians		31.0
Hawaiian		12.0
Japanese American		2.9

While careful epidemiological studies are not available for all veteran populations, PTSD has been diagnosed in veterans of World War II, the Korean War, the Persian Gulf War and UN peacekeeping and humanitarian missions. Prisoners of war and WWII veterans exposed to mustard gas exhibit high rates of PTSD (20-37% and 31%, respectively) (Zeiss et al., 1989; Schnurr et al., 1996). Rates of PTSD among Gulf War veterans and veterans of peacekeeping missions (Somalia, Haiti) are approximately 8-10% (Wolfe, et al., 1999; Orsillo et al., 1998).

How does PTSD affect aging veterans and their co-morbid chronic illnesses?

Many older veterans have experienced the symptoms of PTSD for years, but have coped through “workaholism” and/or alcohol use. Some are skeptical about the concept of PTSD and are sensitive to perceived stigma associated with mental illness help-seeking; they also may be likely to minimize their traumatic experiences and emotional distress. Aging veterans face a variety of situations, health problems, bereavement and retirement, that may activate or worsen PTSD symptoms. Illness and death are reminders of previous danger in war; exposure to the death of significant others is a direct reminder of war zone grief. These problems bring up feelings of vulnerability, loss of control, dependency on others and helplessness, which are important themes for those struggling with PTSD. And when veterans retire, they lose an important avoidance strategy that may have reduced the frequency or intensity of PTSD symptoms.



Post-Traumatic Stress Disorder: Implications for Primary Care

Current thinking is that traumatic experiences may affect the health of aging veterans in ways similar to other kinds of chronic stress. Traumatic experiences and traumatic stress bring about changes in the brain and body in hormonal, neurochemical, immune and autonomic nervous systems. These changes can affect an individual's physical health status in a number of different ways. To date, some of the findings about people with PTSD show that they tend to be more susceptible to the following:

- hypertension and atherosclerotic heart disease
- abnormalities in thyroid and other hormone functions
- infections and immunologic disorders
- problems with pain perception, pain tolerance and chronic pain syndromes

Trauma exposure and traumatic stress also may have psychological and behavioral effects that can further impact physical health. These include:

- depression,
- anxiety and extreme reactivity to fear,
- social isolation and troubled relationships with other people, including increased mistrust, irritability, hostility and anger,
- sleep disturbance,
- increased alcohol and drug consumption (including use of nicotine),
- suicidality, other forms of self-harm and excessive risk-taking,
- revictimization,
- difficulties with self-care including poor eating habits and neglect of medical and dental care, and
- poor coping skills.

Studies of patients seeking medical care show that, most often, underlying traumatic stress responses go unrecognized. In many cases, attention to underlying trauma-related issues can prevent or greatly reduce the severity of traumatic stress, the development of physical and social symptoms and the development of PTSD. Thus, timely mental health treatment may reduce the risk of trauma-related physical and medical problems. (Schnurr & Jankowski, 2000).



Post-Traumatic Stress Disorder: Implications for Primary Care

What are some symptoms frequently associated with PTSD that are not included in the list of classic PTSD symptoms?

All of these problems can be secondary or associated trauma symptoms:

- depression, despair and hopelessness
- loss of important beliefs
- aggressive behavior toward oneself, self-blame, guilt and shame
- problems with identity or sense of self
- feeling permanently damaged
- problems with self-esteem
- physical health symptoms and problems
- alcohol and/or drug abuse
- problems in relationships with people, such as feeling detached or disconnected from others, social isolation or getting into arguments and fights with people.

How can I distinguish “true” PTSD from the potential malingering patient claiming to have PTSD for the purpose of securing service-connected benefits?

The Veterans Benefits Administration (VBA) has agreed to assist primary care clinicians in a records review of combat experience. If you have questions about the veteran’s trauma history, you can contact your regional VBA representative to gather information about the veteran’s service record and combat history. However, the primary care clinician generally does not need to be in the position of determining whether PTSD is “true” or potentially malingered. A mental health referral should be made for a diagnostic work-up of PTSD, at which time the veteran may be referred to the compensation and pension (C & P) process, and the C & P examiner and VBA official will make the determination of whether the PTSD is “genuine” and related to military trauma.

Can a patient have PTSD and be completely asymptomatic?

For some individuals, some of the symptoms of PTSD (such as numbing, irritability, hypervigilance or avoidance) are so ingrained as to be perceived as “part of their personality.” These individuals may not be presenting with PTSD, and therefore may not appear to have any PTSD symptoms that are distressing or interfering with functioning. For some, avoid-



Post-Traumatic Stress Disorder: Implications for Primary Care

ance is so ingrained that they “manage” PTSD simply by restricting their lifestyle to the degree that they have no contact with any reminders of the trauma, and therefore may appear to have relatively few symptoms. For some individuals, symptoms have been effectively managed for years by over-immersion in work or family; for others, substance abuse suppresses many of their symptoms. When such individuals retire, or stop using alcohol or drugs, they often find that their PTSD symptoms re-emerge and compromise their level of functioning in one way or another.

Is there a profile to identify who might be prone to develop PTSD?

The likelihood of developing PTSD (and the severity and chronicity of symptoms experienced) is a function of many variables; however, it is important to bear in mind that, even among vulnerable individuals, PTSD would not exist without exposure to a traumatic event.

First and foremost, then, likelihood of development of PTSD is related to the magnitude, duration and type of traumatic exposure. Other factors related to the development of PTSD are:

- earlier age of trauma exposure,
- lower education,
- severity of initial trauma reaction,
- dissociation during and shortly following a trauma,
- early conduct problems,
- childhood adversity,
- family history of psychiatric disorder,
- poor social support after a trauma, and
- personality traits, such as a tendency to experience negative emotions/reactions.

Women are more likely to develop PTSD than men, independent of exposure type and level of stressor, and a history of depression in women increases the vulnerability for developing PTSD (Halligan & Yehuda, 2000).



Post-Traumatic Stress Disorder: Implications for Primary Care

When and to whom should I refer patients for further evaluation/treatment of PTSD?

If the veteran responds “YES” to two or more of the PC-PTSD screen items or endorses the hyper-arousal item (see Appendix D), and it appears that a patient does have active PTSD symptoms that are interfering with functioning in some way, it is recommended that the patient be provided with a written referral to a mental health professional. It will be important to identify those local mental health providers who specialize in PTSD and have experience in working with trauma survivors. Patient preferences are crucial – for instance, patients may prefer a Vet Center, a local mental health clinic or a VA specialty PTSD clinic. It will be helpful to the mental health professional who receives the referral to have as much information as possible about the patient’s condition. Provide the mental health professional with a copy of the PTSD screening results, any information about health events or injuries that might have been traumatic stressors, and information about any negative effects of the patient’s post-traumatic symptoms on health or medical compliance.

Is there a cure for PTSD?

Most people who are exposed to a traumatic stressor experience some of the symptoms of PTSD in the days and weeks following the stressor, and the duration and intensity of symptoms depends in large part upon the stressor severity. Available data suggest that among individuals who go on to develop PTSD, roughly 30-50% have chronic symptoms that persist for years, with women more likely than men to have a longer course (Kessler et al., 1995). The course of chronic PTSD usually has periods of symptom exacerbation and remission or decrease, although for some individuals symptoms may persist at an unremitting, severe level. PTSD symptoms can be significantly reduced with both pharmacotherapy and psychotherapies. Many survivors will continue to experience some symptoms of PTSD, regardless of treatment, depending upon the severity of the initial exposure to trauma, predisposing characteristics, resources and coping skills. In veterans with chronic PTSD, treatment may accomplish some reduction in the frequency and intensity of symptoms and an increased ability to cope with symptoms more effectively.

What is the current treatment for PTSD?

PTSD treatment in the VA typically involves participation in individual and group counseling, as well as the prescribing of medications designed to treat PTSD (and related problems like sleep difficulties, anger problems, depression and so on). Patients receive careful psychological assessment. They are educated about trauma and its impact and trained in a variety of skills for coping with PTSD or its effects on various areas of their lives. Such training commonly addresses stress or anxiety management skills (e.g., relaxation, deep breathing or self-talk), interpersonal communication skills and anger management or conflict



Post-Traumatic Stress Disorder: Implications for Primary Care

87

resolution skills. Treatment also focuses on reducing the isolation of the veteran and improving his or her family relationships. Participation in ongoing veteran support groups is an important treatment method and goal.

The trauma treatment research field is still young, and treatment research can be complicated and difficult to conduct. Because of this, comparisons of different treatments for PTSD are scarce; therefore, when evaluating the literature, lack of empirical evidence does not equate with lack of treatment efficacy. The current process by which trauma experts evaluate treatment options is to study the empirical literature, as well as take into account clinical consensus on treatments which have proven effective in case studies or across clinical settings. The choice of a treatment modality is based on many factors, including unique client life challenges, side/potential negative effects, cost, length of treatment, cultural appropriateness, therapist's resources and skills, client's resources and stressors, co-morbidity of other psychiatric symptoms, the fluctuating course of PTSD, fostering resilience, stability and relapse prevention, and legal, administrative and forensic implications.

While there is limited empirical literature for the treatment of trauma-related conditions, there are a number of treatment approaches that have gained solid empirical support. These treatments have shown promising results across a number of different contexts and with different trauma populations, and merit strong consideration when developing a training program for clinicians. To date, treatments that have gained the most empirical support include cognitive-behavioral therapies (including exposure therapy, cognitive therapy and stress inoculation training), Eye Movement Desensitization and Reprocessing (EMDR) and pharmacotherapy. Selective Serotonin Re-uptake Inhibitors (SSRIs) are recommended as the first line medication treatment for PTSD. This is not only because such drugs have performed better than other agents in drug trials conducted so far, but because serotonergic mechanisms appear to mediate core PTSD symptoms, as well as depressive symptoms which commonly co-occur with PTSD (Foa et al., 2000).

What drugs are used to treat PTSD?

The most important recent development concerning pharmacotherapy for PTSD is that the US Food and Drug Administration has approved the Selective Serotonin Re-uptake Inhibitor (SSRI) sertraline (Zoloft) as an indicated treatment for PTSD. In two large, multi-site trials with civilians (mostly Caucasian females with PTSD resulting from child or adult sexual and/or physical abuse), sertraline was shown to be significantly more effective than a placebo. Furthermore, sertraline's efficacy was broad-spectrum suppression of all three clusters (i.e., re-experiencing, avoidant/numbing and hyperarousal) of PTSD symptoms. In addition, sertraline produced significant global improvement.



Post-Traumatic Stress Disorder: Implications for Primary Care

There was some question after the sertraline trials whether SSRI treatment was as effective for men and for combat veterans as it clearly was for women with non-combat trauma. Subsequent large-scale trials with the SSRI paroxetine (Paxil) suggest that SSRI treatment is definitely effective both for men and for combat veterans. Further evidence for SSRI efficacy in men and combat veterans comes from recent studies with the SSRI fluoxetine. Therefore, SSRIs are definitely the first line medications for PTSD pharmacotherapy. They have a broad spectrum of action against all clusters of PTSD symptoms and appear to be effective for both men and women who have been exposed to all varieties of trauma. It does appear, however, that individuals with long-standing chronic, severe and debilitating PTSD may not respond favorably to medication (or to psychotherapy).

Other medications that are being utilized frequently for PTSD are nefazadone (Serzone), venlafaxine (Effexor) and valproate (Depakote), all of which are well-established as effective antidepressants. There are no published randomized trials supporting the efficacy of any of these drugs, although there are positive open label PTSD trials with nefazadone and valproate.

It is necessary to keep in mind that evidence favoring the use of older antidepressants (e.g., tricyclic antidepressants, TCAs and monoamine oxidase inhibitors or MAOIs) is stronger than for these newer agents, although clinicians have tended not to prescribe these agents since we have entered the era of SSRI treatment. One should remember, however, that TCA or MAOI treatments remain important options for patients who fail to respond favorably to SSRIs.

Finally, it is important to note that despite widespread use of benzodiazepines such as diazepam, alprazolam and clonazepam, there is no evidence that such medications are effective against core PTSD re-experiencing and avoidant/numbing symptoms. They are effective as hypnotics and in reducing general anxiety but such benefits must be weighed carefully against the proven superiority of other agents, as well as the abuse potential of such drugs among some individuals.

Many patients with PTSD receive combined pharmacological and psychotherapeutic treatment. Currently, there is no empirical evidence that combined treatment is more efficacious than either treatment alone, but there is no doubt that many clinicians believe this to be the case. Clinical trials have just begun to determine whether there are advantages of combined treatment over monotherapy, and if so, for whom and under what conditions (Friedman, 2001).



Post-Traumatic Stress Disorder: Implications for Primary Care

What strategies can I suggest to help a patient/family better cope with this condition?

Useful information and helpful coping strategies for patients and their families are included in Appendix C of this document. Additional information on PTSD is available on the National Center for PTSD website, at www.ncptsd.org. Briefly, patients should be encouraged to:

- seek education about trauma, PTSD and coping,
- participate in PTSD support groups and PTSD treatment,
- seek help in tackling related problems such as alcohol and drug use, social isolation, anger and avoidance,
- learn to recognize triggers for stress,
- find ways to get support from others, especially others who also suffer from the effects of trauma,
- increase participation in healthy, appropriate activities that they enjoy,
- learn relaxation techniques,
- develop an exercise routine, in moderation, with physician approval, and
- take classes to learn better coping tools.

Families of trauma survivors with PTSD should be encouraged to continue to learn more about PTSD by attending classes, viewing films, reading website materials, articles or books. It is recommended that they encourage but do not pressure the survivor to seek counseling from a PTSD specialist and to seek personal, child, couples or family counseling if troubled by “secondary” trauma reactions such as anger, addiction or problems in school, work or intimacy. Family members themselves also may benefit from classes on stress and anger management, couples communication or parenting. They also are encouraged to stay involved in positive relationships, in productive work and education, and in enjoyable pastimes. If physical (domestic) violence is occurring, family members such as spouses, children or elders must be protected from harm.

Can a patient relapse from PTSD after treatment?

Yes. Both partial and full relapse of PTSD symptoms are not uncommon after treatment, particularly with veterans who have higher rates of alcohol consumption and lower program participation in treatment. Lower levels of prior functioning, co-morbid psychiatric or



Post-Traumatic Stress Disorder: Implications for Primary Care

90

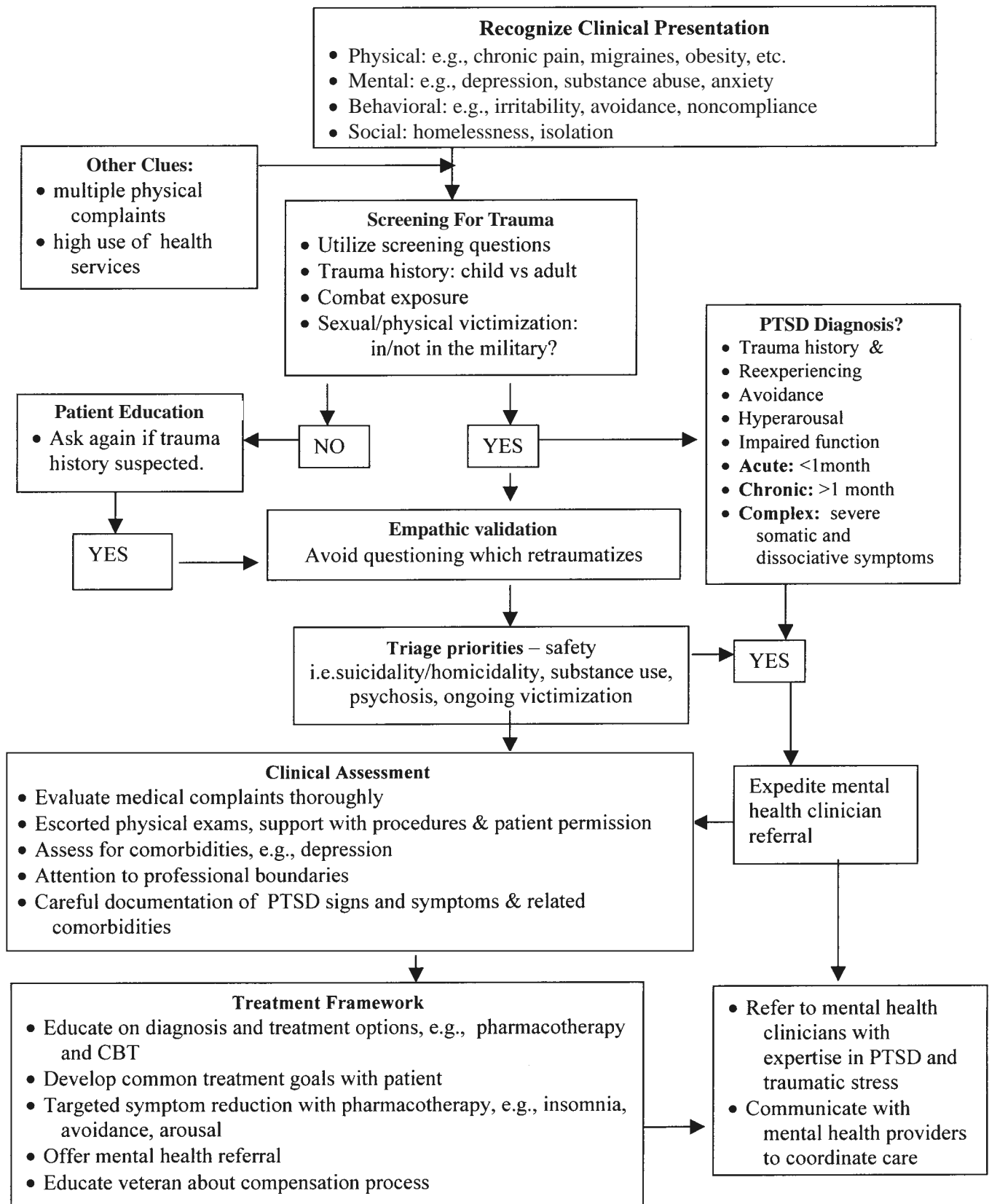
substance abuse disorders, a strong “trigger (reminder of the trauma)” or some major change in their lives which compromises their level of functioning may also contribute to patient relapse.

What should I do to support my patient while he/she is being treated for PTSD?

Regular check-ins with patients about their current levels of PTSD symptoms, their coping skills and follow-up with referrals are crucial for keeping patients involved in their own recovery process. Referral to multiple sources of support and information, such as the National Center for PTSD website (www.ncptsd.org), veterans service organizations, Readjustment Counseling Service, local mental health agencies and veteran’s benefits officers is recommended and will maximize opportunities for receiving help for PTSD symptoms and related problems. Awareness of the potentially stressful effects of participating in PTSD treatment itself will encourage the primary care provider to monitor the veteran’s health, treatment compliance and functioning during treatment for PTSD.

APPENDIX A

Algorithm for Assessment of Trauma Symptoms in Veterans



(Adapted from a treatment framework algorithm developed by MI. Butterfield MD, and Mary E. Becker MS)



APPENDIX B

Quick Reference Guide

This guide is intended as an easily-scanned summary of the comprehensive information in the longer manual. Please refer to the manual for clarification of any of the information contained in this guide.

I. INTRODUCTION

- What do Patients with a History of Trauma Look Like?
- Why Screen Veterans for Stress and Trauma?
- Attitudes that Impede Trauma Detection
- Why is Routine Screening for Trauma Crucial?
- What can a Primary Care Practitioner do to Address PTSD and Trauma?
- How can Appropriate Treatment Impact Trauma-Related Problems?

II. BACKGROUND

- Characteristics of Trauma
- Diagnoses Associated with Trauma Exposure
- Other Problems Patients with a Trauma History Report
- Effects of PTSD on Physical Health
- How Veterans of Different Wars Present
- Why is it Important for Primary Care Clinicians to Know about Sexual Trauma?
- Consequences of Sexual Trauma in Women
- Consequences of Sexual Trauma in Men



III. GUIDELINES FOR SCREENING FOR TRAUMA-RELATED SYMPTOMS

- Effective Screening and Referral Procedures
- Screening Tool
- Discussing Screening Results with Patients
- Screening for Sexual Trauma in Women
- If the Patient Refuses Referral To Mental Health

IV. EFFECTIVELY WORKING WITH TRAUMA SURVIVORS

- Appropriate Treatments
- Medical Compliance and Management
- Improving Medical Compliance
- If Post-Traumatic Symptoms Occur During an Exam
- Interpersonal Boundary Issues
- Preventing Harmful Boundary Crossings
- The Compensation-Seeking Veteran with PTSD
- Models for Behavioral Health Care Within a Primary Care Setting
- Advantages of Integrating Behavioral Health



Post-Traumatic Stress Disorder: Implications for Primary Care

PART I: INTRODUCTION

What do Patients with a History of Trauma Look Like?

Patients with a history of trauma may have a number of the following characteristics:

1. Irritable and/or hostile
2. Avoidant of medical appointments
3. Chronically poor in self-care health habits
4. Either reluctant to admit to health problems, or needy and/or demanding
5. More likely to present in emergency than for regularly scheduled appointments
6. Having a history of alcohol/substance abuse, depressive symptoms, chronic relationship difficulties and/or intermittent employment history
7. Complex medical and psychological care cases

Why Screen Veterans for Stress and Trauma?

It is important to screen for trauma because:

Trauma is common

More than half of all male Vietnam veterans and almost half of all female Vietnam veterans, about 1,700,000 Vietnam veterans in all, have experienced “clinically serious stress reaction symptoms.”

Trauma often leads to PTSD and other impairment

- Twenty percent of VA ambulatory care outpatients screen positive for PTSD.
- Those exposed to trauma are three times more likely to be diagnosed with depression and two times more likely to be diagnosed with an alcohol disorder.
- Patients with PTSD experience a degree of impairment similar to that observed in patients suffering from major depression, including poor self-care.



Post-Traumatic Stress Disorder: Implications for Primary Care

Trauma often presents to primary care, but goes unrecognized

Nearly half of all patient visits for a mental health disorder are to a medical clinic or provider. Of those visits, 90% are to primary care providers.

Failure to identify and treat PTSD has adverse effects on physical and mental health

- Life-threatening medical conditions, such as heart attacks, severe burns, severe injuries and cancer can cause or exacerbate PTSD. In turn, untreated PTSD can impair recovery from these conditions.
- Traumatic experiences bring about hormonal, neurochemical, immune functioning and autonomic nervous system changes which can impact an individual's physical health.
- PTSD is associated with significant problems in living, including alcohol abuse, marital problems and suicide, with high levels of utilization of medical services.
- Chronic PTSD symptoms are not likely to go away on their own.

Most trauma victims do not seek mental health services. Instead, they look for assistance and care in the primary care setting. Most patients do not object to being queried about their trauma history in a primary care setting. While treatment-seeking patients do not typically disclose personal trauma histories spontaneously, they usually will provide this information if queried directly.

What are the Provider Concerns that Impede Trauma Detection?

Concern:	Instead, consider:
“It’s upsetting to the patient.”	It may be upsetting to the patient <u>not</u> to talk.
“It’ll re-traumatize the patient.”	Talking about trauma is not the same thing as experiencing a traumatic event.
“It won’t do any good.”	It may be experienced as caring or helpful by the patient and may lead to treatment.
“I don’t know what to do about it.”	It may be helpful just to raise the subject and offer a referral.
“It’ll embarrass us both.”	Physicians and nurses routinely take on subjects that are potentially embarrassing.



Post-Traumatic Stress Disorder: Implications for Primary Care

“It will offend him or her.”	Most trauma survivors will not be offended.
“It’s not my role to ask about trauma history.”	It is the role of the health care provider to work to improve health, and trauma/PTSD affects health.
“I don’t have the time.”	Raising this issue takes little time and may save valuable clinical time in the long run.
“It has little to do with health concerns.”	It has documented associations with a host of physical health problems and health services utilization.

What are the Patient Factors that Impede Trauma Detection?

- The patient may not know about post-traumatic stress disorder, its causes and symptoms.
- The link between health concerns and emotional problems may not be clear to the patient.
- The patient may have skepticism regarding benefits of sharing a trauma story, such as:
 - “This person can’t help me anyway;”
 - “It doesn’t have anything to do with my health;”
 - “If I talk about it, I’ll become upset/angry/hysterical;”
 - “This person doesn’t want to hear about it;”
 - “It’s too private/shameful to tell.”

What can a Primary Care Practitioner do to Address PTSD and Trauma?

Health care providers in primary care settings can utilize knowledge of trauma-related problems to:

- conduct brief screening,
- provide educational materials to patients,
- provide referral for evaluation and treatment,
- educate staff,
- improve treatment planning based upon knowledge of trauma, and
- establish multidisciplinary teams that ensure integration and continuity of patient care.



Post-Traumatic Stress Disorder: Implications for Primary Care

97

How can Appropriate Treatment Impact Trauma-Related Problems?

Appropriate treatment for trauma-related problems:

- reduces psychological distress and improves overall functioning,
- reduces stress-related medical problems,
- increases the survivor's ability to adhere to and benefit from medical care, and
- enables the survivor to prevent trauma from continuing (e.g., by interrupting poor self-care or ongoing domestic violence).



Post-Traumatic Stress Disorder: Implications for Primary Care

PART II: BACKGROUND INFORMATION ON TRAUMA

What are the Characteristics of Trauma?

The Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV) specifies a traumatic event as:

- involving actual or threatened death or injury or a threat to physical integrity, and
- a person's response to such a life event must have involved intense fear, helplessness or horror.

Across types of traumatic events, about 15-25% of trauma victims will develop post-traumatic stress disorder (PTSD). Rates of PTSD will be higher if trauma exposure has been more severe. For example, between 30 and 70% of POWs will have chronic PTSD.

What are the Diagnoses Associated with Trauma Exposure?

The symptoms of post-traumatic stress can lead to a diagnosis of **post-traumatic stress disorder (PTSD)** if they are present for more than 30 days after a traumatic incident. **PTSD symptoms fall into three categories:**

Re-experiencing symptoms:

- unwanted, distressing recollections of the trauma
- recurring, distressing dreams about the trauma
- reliving or flashbacks of the trauma
- intense distress when reminded of the trauma
- physiological reactivity when reminded of the trauma

Avoidance symptoms:

- efforts to avoid thinking about the trauma
- efforts to avoid people, activities or situations that arouse memories of the trauma
- inability to recall certain aspects of the trauma



Post-Traumatic Stress Disorder: Implications for Primary Care

- loss of interest in important activities
- feelings of being detached or cut off from others
- emotional restriction or feelings of emotional numbness
- expectations of a foreshortened future

Arousal symptoms:

- trouble falling or staying asleep
- irritability or outbursts of anger
- difficulty concentrating
- hypervigilance
- an exaggerated startle response

Symptoms of PTSD are distinguished from “normal” (non-pathological) remembering of stressful events by their persistent nature, evocation of emotional distress and disruption of functioning in daily life.

The term “**complex PTSD**” has been coined to define the symptoms unique to long-term trauma (e.g., concentration camp and prisoner of war experiences, domestic violence or child abuse), including:

- alterations in emotional regulation
- alterations in consciousness
- alterations in self-perception
- alterations in perception of perpetrator
- alterations in relations with others
- alterations in system of meaning

Acute Stress Disorder (ASD) symptoms are similar to PTSD symptoms, with ASD being diagnosed in the first 30 days following a trauma. Acute trauma reactions, while normal, introduce many complications into medical treatment, including:

- specific somatic problems due to severe stress reactions (e.g., tachycardia or diaphoresis),
- diffuse somatic reactions due to emotional distress (e.g., migraines or irritable bowel syndrome), and



Post-Traumatic Stress Disorder: Implications for Primary Care

100

- difficulties with following regimens and attending appointments due to stress, distress, confusion and disorganization.

In addition to PTSD and ASD, individuals with history of trauma are at heightened risk for developing other problems, including:

- depression,
- substance abuse,
- obsessive-compulsive disorder,
- suicidal ideation,
- sexual dysfunction,
- eating disorders,
- homelessness, and
- revictimization (increased risk of subsequent exposure to trauma).

What Other Problems do Patients with a Trauma History Report?

In addition to the problems listed above, patients with a trauma history also may report:

- difficulty trusting others,
- irritability and anger,
- intense emotions when reminded of their trauma,
- feeling unsafe and remaining “on guard” for possible threats in the environment,
- difficulty experiencing positive emotions such as love or happiness,
- difficulty controlling their trauma memories,
- inability to feel sadness or to cry, even with death of a family member, and
- “workaholism” and/or alcohol/substance use.



Post-Traumatic Stress Disorder: Implications for Primary Care

Do Veterans of Different Wars Present Differently?

Vietnam veterans may have:

- exposure to brutality, mutilated bodies or the death of children,
- greater mistrust of authority,
- hostility towards the government,
- negative early experiences with VA health care services,
- inability to maintain employment,
- greater levels of alienation from civilian society, and
- relatively greater social isolation.

Older veterans of WWII and Korean wars may have:

- skepticism about the concept of PTSD,
- sensitivity to perceived stigma associated with mental illness,
- minimization of their emotional distress,
- activation of PTSD from health problems and bereavement,
- aging-related vulnerability and loss of control, and
- loss of work as an avoidance strategy.

Veterans of more recent deployments may have:

- medically unexplained physical symptom syndromes,
- trauma symptoms due to graves registration duties,
- witnessed violence without being able to intervene,
- exposure to sexual harassment in both males and females,
- reluctance to join treatment dominated by older veterans,
- relatively low rates of utilization of PTSD services in the VA, and
- feelings that their service was less traumatic than earlier wars.



How does a Trauma History Affect Family Relationships?

Because the symptoms of PTSD and other trauma reactions change how a trauma survivor feels and acts, traumatic experiences that happen to one member of a family can have an effect on everyone else in the family. The primary care practitioner may see similar trauma-related behaviors in both trauma survivors and in family members or caretakers. All of the reactions described below are common in families following trauma:

- “vicarious” or “secondary” traumatization
- pressure, tension or oppression
- feelings that dialogue and teamwork are impossible
- having low expectations for the trauma survivor
- depression
- fearfulness about safety, anger and aggression, or nightmares or flashbacks
- wanting to avoid talking about the trauma or trauma-related problems
- guilt or shame
- anger about how the trauma and its effects have caused problems
- negative feelings because of new behaviors that developed following a trauma
- drug and alcohol abuse
- difficulty falling or staying asleep
- health problems

What are the Effects of PTSD on Physical Health?

The specific health problems associated with PTSD are varied and suggest multiple etiologies; neurobiological, psychological, and behavioral factors are likely explanations. Research has increasingly demonstrated that PTSD can lead to neurobiological dysregulation, altering the functioning of catecholamine, hypothalamic-pituitary-adrenocorticoid, endogenous opioid, thyroid, immune and neurotransmitter systems. It is not surprising, therefore, that exposure to traumatic stress is associated with increased health complaints, health services utilization, morbidity and mortality. PTSD appears to be a key mechanism that accounts for the association between trauma and poor health. Many individuals with PTSD have substance use (alcohol and drug use) co-morbidities for which the primary care



Post-Traumatic Stress Disorder: Implications for Primary Care

103

provider is well poised to intervene. For instance, 60% of veterans with PTSD smoke cigarettes. PTSD and exposure to traumatic experiences also are associated with a variety of health-threatening behaviors, such as alcohol or drug abuse, risky sexual practices, suicide and other seemingly self-destructive behaviors. Risks of infectious diseases are high in PTSD cohorts, including HIV and Hepatitis B&C, as well as other sexually transmitted diseases. More information about the relationship between PTSD and Health is provided in Appendix F: Schnurr & Jankowski, 1999, "Physical Health and Post-Traumatic Stress Disorder: Review and Synthesis."

Why is it Important for Primary Care Clinicians to Know About Sexual Trauma?

VHA Mandate:

VHA has recently mandated that all veteran patients be screened for the presence of military sexual trauma. All medical centers are required to have a designated military sexual trauma (MST) coordinator tasked with ensuring that this screening takes place and is documented, developing local implementation guidelines and identifying treatment resources. For patients identified as having military sexual trauma, all providers are required to indicate if care provided at each visit is related to MST. **This new mandate requires that providers be familiar with the kinds of conditions that may be associated with military sexual trauma.**

Improved Clinical Practice:

Military Sexual Trauma is more common in women than men. Most women report never having been asked by their provider about a history of sexual trauma and few spontaneously offer sexual trauma history, although most indicate that they would like to be asked.

If the trauma survivor is experiencing ongoing stress related to her/his prior trauma, knowing about the trauma allows the clinician to offer a mental health referral, which may be useful for trauma processing, stress reduction and coping with chronic pain, or for pharmacologic treatment of depression or PTSD.

By identifying a history of sexual trauma, providers can anticipate problems that may arise in their interactions with patients, such as the possibility that pelvic examinations may be distressing to the patient because they remind her of her trauma experience.



Post-Traumatic Stress Disorder: Implications for Primary Care

How Common is a History of Sexual Trauma among Female VA Patients?

Of care-seeking female veterans:

- 23% have reported experiencing a sexual assault while in the military.
- 25% to 50% have experienced domestic violence in their lifetimes.

Of women in the military:

- 36-45% report pre-military sexual assault or molestation.

In women who have had childhood trauma, another episode of sexual trauma during adulthood may result in greater symptomatology than would have been seen with childhood trauma alone. Exposure to sexual trauma in childhood and again during military service may explain high degrees of symptomatology seen in some women veterans.

What are the Consequences of Sexual Trauma in Women?

The **physical symptoms** seen after trauma may be at least partially explained by neuro-endocrine derangement and can include:

- chronic pelvic pain
- back pain
- fibromyalgia
- headache
- digestive problems
- respiratory problems
- gastrointestinal problems
- neurological problems

A number of **medical conditions** have been reported to have higher prevalence among women with a history of sexual trauma:

- sexually transmitted disease
- pelvic inflammatory disease



Post-Traumatic Stress Disorder: Implications for Primary Care

105

- diabetes
- obesity
- arthritis
- asthma
- irritable bowel syndrome
- eating disorders
- hypertension

Medical interventions, including recurrent surgeries, also are seen more commonly among women with prior sexual trauma than in other women.

The most widely studied psychological consequence of sexual assault is PTSD. The experience of a **sexual assault may be more likely to lead to PTSD than other types of traumatic events**, including combat. Forty-five percent of women who reported having experienced a rape met criteria for PTSD, which is significantly higher than the 39% rate of PTSD among men who had experienced combat.

Other **psychological conditions** associated with sexual trauma include:

- depression
- eating disorders
- substance abuse disorders
- dissociative disorders
- suicidal ideation
- sexual dysfunction

Sexual assault survivors are **high utilizers of health care** services, particularly emergency room visits. They also have increased physician visits and outpatient costs, even in comparison to women who have been victims of other types of crime.

Although women who have experienced sexual assaults may have considerable mental health symptoms, they are **significantly more likely to present in medical than in mental health settings**.



Post-Traumatic Stress Disorder: Implications for Primary Care

106

A large portion of sexual trauma survivors report **unpleasant experiences during a gynecological exam**, many of which were not reported to the providers. These include:

- overwhelming emotions,
- unwanted or intrusive thoughts,
- having traumatic memories triggered, and
- feelings of detachment from the body.

How Common is a History of Sexual Trauma among Males?

- At least 10% of men in the United States have suffered from trauma as a result of sexual assault.

What are the Consequences of Sexual Trauma in Men?

Men who have sexual assault experiences report:

- Emotional Disorders – (PTSD, other anxiety disorders and depression)
- Substance Abuse – (80% , as compared to 11% in men who have never been sexually abused)
- Risk Taking Behavior – (such as behaviors that increase risk for contracting the HIV virus)

How can Gender Socialization Affect Men who have been Sexually Assaulted?

- “hyper-masculinity” (i.e., multiple female sexual partners or engaging in dangerous “macho” behaviors)
- feeling invalidated by the attitudes of others who don’t recognize that men can also be victimized
- fearing that the sexual assault by another man will “cause” them to become gay
- feeling ashamed, not talking about it and not seeking help from professionals



Post-Traumatic Stress Disorder: Implications for Primary Care

107

Are Men who were Sexually Assaulted as Children More Likely to Become Child Molesters?

- Men who were sexually abused by men during their childhood may have more sexual thoughts and fantasies about sexual contact with male children and adolescents.
- Most male victims of child sexual abuse do not become sex offenders.
- Many men who sexually assault do not have a history of child sexual abuse.
- Sexual offenders more often grew up in families where they suffered from several forms of abuse.
- Men who assault others have difficulty with empathy.



Post-Traumatic Stress Disorder: Implications for Primary Care

108

PART III: GUIDELINES FOR SCREENING FOR TRAUMA RELATED SYMPTOMS IN A PRIMARY CARE SETTING

What are Effective Screening and Referral Procedures for Trauma-Related Conditions?

Screening procedures

- Include brief, direct questions about trauma exposure and post-trauma symptoms as a routine part of patient contact.
- Distribute pencil-and-paper self-report forms prior to a medical appointment to all patients, or add screening items to standard medical history forms that patients complete at first visits.
- Have the physician, nurse, physician's assistant or a mental health consultant review the screening instrument to identify patients who are likely to be experiencing distressing post-trauma reactions.

Response to a positive screen

- Discuss the instrument with the patient.
- Decide whether the veteran may benefit from further specialized mental health evaluation.
- If the veteran would benefit from evaluation and treatment, refer him/her to specialized PTSD treatment, behavioral medicine or more general mental health services.
- Provide the patient with educational materials about trauma and PTSD (included in Appendix C).

Follow-up

At the patient's next visit, it is important to ask whether he or she followed through with the referral for mental health evaluation or care. If a patient did follow through, ask:

1. Was the referral perceived as helpful?
2. Is the patient still in need of care?
3. If the patient did not follow through with the referral and still has symptoms, what were the obstacles to obtaining care?



Post-Traumatic Stress Disorder: Implications for Primary Care

109

What Screening Tool is Effective for Identifying Trauma-Related Problems?

In this manual, information about a number of trauma screening tools is provided. The PTSD Primary Care Screen (PC-PTSD) that has been designed for use in primary care and other medical settings is included in Appendix D, due to its positive research support. The PC-PTSD screen includes the following questions:

Have you ever had an experience that was so frightening, horrible, or upsetting that in the past month, you:

- Have had nightmares about it or thought about it when you did not want to?
- Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
- Were constantly on guard, watchful, or easily startled?
- Felt numb or detached from others, activities, or your surroundings?

The PC-PTSD is considered “positive” if a patient responds “YES” to two or more of the screen items. A positive response to the screen does not necessarily indicate that a patient has post-traumatic stress disorder, but it does indicate that a patient **may** have PTSD or trauma-related problems and that further investigation of trauma symptoms by a mental health professional may be warranted.

What are the Recommended Guidelines for Discussing Screening Results with Patients?

Provide an appropriate context for the discussion.

- Ensure privacy by closing the door and keeping family members out of the room.
- Inform patients that traumatic events and the distress they create can have important effects on the body and on health, as well as on the patient’s psychological functioning.
- Explain that you are opening this discussion as part of an effort to provide more comprehensive health care, and that a greater understanding and recognition of symptoms of post-traumatic stress may be of benefit, both psychologically and physically.



Post-Traumatic Stress Disorder: Implications for Primary Care

110

Ask about traumatic events:

- Avoid terms like “incest,” “rape,” “sexual trauma,” “domestic violence” or “victimization”.
 - These terms are emotionally laden.
 - They may not be understood by the patient.
 - He or she may not think of what happened to him/her in these terms.
- Make no assumptions about the meaning or impact of traumatic events for an individual; they may be inconsistent with the patient’s feelings and experience.
- As the patient is responding to your questions:
 - acknowledge any reported distress (e.g., “I’m sorry you have had such terrible nightmares.”).
 - show interest and concern, and tell the patient that you are glad that he or she has told you about the symptoms.
 - offer empathic support.
 - it is probably not advisable to elicit a detailed account of the trauma or to challenge the patient’s report in any way, unless you have appropriate mental health training and will be the person to evaluate or treat the patient.
- The practitioner may say:

“Many veterans have experienced extremely distressing events at some time in their lives, such as combat, physical or sexual assault or a bad accident. Have you ever had any experiences like that?”
- For sexual trauma in particular, questions should be behaviorally based:

“Did you ever have an experience where someone used force or the threat of force to have sexual contact with you against your will?”

If the PC-PTSD screening instrument is utilized, clarify responses to determine:

a. whether patient has had a traumatic experience:

“I notice from your answers to our questionnaire that you experience some symptoms of stress. Many veterans have experienced extremely distressing events at some time in their lives, such as combat, physical or sexual assault or a bad accident, and sometimes those events lead to the kinds of symptoms you have. Have you ever had any experiences like that?”



Post-Traumatic Stress Disorder: Implications for Primary Care

- b. whether endorsed screen items are really trauma-related symptoms:

“I see that you have said you have nightmares about or thought about an upsetting experience when you did not want to. Can you give me an example of a nightmare or thinking about an upsetting experience when you didn’t want to?”

If a patient gives an example of a symptom that does not appear to be in response to a traumatic event (i.e., divorce rather than traumatic event), it may be that he or she is ruminating about a negative life event rather experiencing intrusive thoughts about a traumatic stressor.

- c. whether endorsed screen items are disruptive to the patient’s life:

“How have these thoughts, memories or feelings affected your life? Have they interfered with your relationships? Your work? How about with recreation or your enjoyment of activities?”

Positive responses to these questions, in addition to endorsement of trauma symptom items, indicate increased likelihood that the patient has PTSD and needs further evaluation.

- d. whether traumatic events are ongoing in a patient’s life:

If ongoing family violence is suspected, it is imperative that the patient knows the limits of confidentiality for medical professionals, who are mandated reporters for suspected ongoing abuse of children and dependent adults (see Appendix E).

Discussion of possible abuse should take place in the absence of the suspected perpetrator; if the abuser is present, victims may deny abuse for fear of retaliation.

The practitioner might ask:

“Are any of the dangerous or life-threatening experiences still continuing in your life now?”

Inquiry into domestic violence experiences:

“Because violence is so common in our society, I ask all my patients about their experiences. Has your partner ever hit, kicked, threatened or otherwise frightened or hurt you?”

For a patient in an established relationship:

“What happens when you and your partner fight?”

If a veteran is currently in an abusive relationship, perform a **safety assessment** to assure that she/he is not in immediate danger. Major risk factors for more serious injury or death include:



Post-Traumatic Stress Disorder: Implications for Primary Care

112

- escalating frequency or severity of abuse
- presence of firearms in the home
- jealous or controlling behavior by the perpetrator
- suicidal or homicidal ideation by the perpetrator
- the veteran's own sense that she/he is in danger (*"Are you afraid to go home today?"*)

If ongoing family violence is suspected, it is imperative that the patient knows the limits of confidentiality for medical professionals, who are mandated reporters for suspected ongoing abuse of children and dependent adults (see Appendix E).

Discussion of possible abuse should take place in the absence of the suspected perpetrator; if the abuser is present, victims may deny abuse for fear of retaliation.

If ongoing threats to safety are present:

- acknowledge the difficulty in seeking help when trauma has not stopped,
- determine if reporting is legally mandated and, if so, develop a plan with the patient to make the report so as to increase and not reduce the safety of the patient and his or her loved ones, and
- if reporting is not appropriate, provide written (or oral, if written might stimulate violent behavior in the perpetrator) information about local helping resources and establish a plan that the patient will agree to in order to move toward increased safety.

Information on establishing a safety plan and addressing the domestic violence are available at:

- www.feminist.org/911/crisis.html
- National Domestic Violence Hotline: 800/799-SAFE
- Rape, Abuse, Incest National Network: 800/656-HOPE)

Make a recommendation for further evaluation and provide referral:

If it appears that a patient does have active PTSD symptoms:

- explain why the screen results lead you to recommend that he or she seek further evaluation and/or treatment.



Post-Traumatic Stress Disorder: Implications for Primary Care

113

- encourage the patient to voice any reservations or concerns he or she might have about seeking treatment. You may be able to facilitate pursuit of treatment by listening to these concerns, acknowledging their validity and addressing some of their questions about what to expect during evaluation and treatment.
- emphasize that untreated PTSD symptoms are not likely to go away on their own, if the person has had PTSD symptoms for years.
- make sure the patient understands that he/she is not crazy.
- explain to patients that, although a wish to avoid any reminders of the trauma is natural and common, this avoidance may actually interfere with recovery; it may prevent potentially helpful processes that result from talking through the experience, receiving social support or receiving specialized treatment.
- invite family members to participate in a brief discussion to enlist their cooperation in supporting an evaluation by a mental health specialist.
- provide the patient with a written referral to a mental health professional.

Provide information to the mental health professional

Provide the mental health professional with:

- a copy of the PC-PTSD results,
- any relevant information about health events or injuries that might have been traumatic, and
- information about any suspected negative impact of the patient's post-traumatic symptoms on health or medical compliance.

Schedule a follow-up.

Consider using scheduled in-person or telephone follow-ups, and/or relatively frequent brief office visits. Regular check-ins with patients about their current functioning, and follow-up with referrals is crucial for keeping the patient involved in their own recovery process.



Post-Traumatic Stress Disorder: Implications for Primary Care

PART IV: EFFECTIVELY WORKING WITH TRAUMA SURVIVORS IN A PRIMARY CARE SETTING

What are Appropriate Treatments for Trauma-Related Conditions?

Psychotherapy, with a combination of cognitive-behavioral techniques, has been shown to be effective in treating both acute and longer-term symptoms of traumatic stress. A description of different types of psychotherapy for trauma survivors is included in this manual. Pharmacotherapy can be helpful in providing symptomatic relief of anxiety, depression and insomnia, whether or not they improve core PTSD intrusive and avoidant/numbing symptoms.

Drug Class	Specific Medication	Daily Dose	Indications	Contraindications
SSRI – Selective Serotonin Re-uptake Inhibitors	Sertraline Paroxetine Fluoxetine Fluvoxamine	50-200 mg 10-40 mg 20-80 mg 250-300 mg	<ul style="list-style-type: none"> • Reduces B, C, & D symptoms • Produces Clinical Global Improvement • Effective Treatment for Depression, Panic Disorder, and Obsessive-Compulsive Disorder • Reduces Associated Symptoms (rage, aggression, impulsivity, suicidal thoughts) 	<ul style="list-style-type: none"> • May produce insomnia, restlessness, nausea, decreased appetite, daytime sedation, nervousness, and anxiety • May produce sexual dysfunction, such as decreased libido, delayed orgasm, or anorgasmia • May produce clinically significant drug interactions when prescribed to people taking MAOIs or other drugs for other medical conditions

LEGEND: **B Symptoms:** intrusive recollection
C Symptoms: avoidant/numbing
D Symptoms: hyperarousal

Table continued on next page



Post-Traumatic Stress Disorder: Implications for Primary Care

continued

TABLE 4
EVIDENCE FOR EFFICACY OF MEDICATIONS IN THE TREATMENT OF PTSD
(Friedman, 2001)

Drug Class	Specific Medication	Daily Dose	Indications	Contraindications
Other Serotonergic Antidepressants	Nefazadone Trazadone	100-600 mg 25-500 mg	<ul style="list-style-type: none"> • May reduce B, C, & D symptoms • Trazadone is synergistic with SSRIs & reverses SSRI-induced insomnia • Effective antidepressants: few side effects 	<ul style="list-style-type: none"> • May be too sedating
MAOI – Monoamine Oxidase Inhibitor	Phenelzine	45-75 mg	<ul style="list-style-type: none"> • Reduces B symptoms • Produces Global Improvement • Effective Antidepressant and Antipanic Agent 	<ul style="list-style-type: none"> • Patients must follow a strict dietary regimen or they may have a dangerous elevation in blood pressure (i.e., a hypertensive crisis) • Contraindicated in patients with alcohol/substance abuse/dependency • May produce insomnia, hypotension, anticholinergic and severe liver toxicity
TCA – Tricyclic Antidepressants	Imipramine Amitriptyline Desipramine	150-300 mg 150-300 mg 150-300 mg	<ul style="list-style-type: none"> • Reduces B symptoms • Produces Global Improvement • Effective Antidepressant and Antipanic Agent 	<ul style="list-style-type: none"> • Anticholinergic side effects (dry mouth, rapid pulse, blurred vision, constipation) • May produce abnormal electrocardiogram • May produce hypotension (low blood pressure), arousal, or sedation

LEGEND: **B Symptoms:** intrusive recollection
C Symptoms: avoidant/numbing
D Symptoms: hyperarousal

Table continued on next page



Post-Traumatic Stress Disorder: Implications for Primary Care

continued

TABLE 4
EVIDENCE FOR EFFICACY OF MEDICATIONS IN THE TREATMENT OF PTSD
(Friedman, 2001)

Drug Class	Specific Medication	Daily Dose	Indications	Contraindications
Anti-Adrenergic Agents	Clonidine	0.2-0.6 mg	<ul style="list-style-type: none"> • Reduces B & D symptoms 	<ul style="list-style-type: none"> • May lower blood pressure or slow pulse rate too much • Must use cautiously with patients on hypotensive medications
	Propranolol	40-160 mg	<ul style="list-style-type: none"> • Reduces B & D symptoms 	<ul style="list-style-type: none"> • Propranolol may produce depressive symptoms or psychomotor slowing
Antianxiety Agents	Alprazolam Clonazepam	0.5-6 mg 1-6 mg	<ul style="list-style-type: none"> • Reduces D symptoms only • Effective Anxiolytics & Antipanic agents 	<ul style="list-style-type: none"> • Should not be prescribed to patients with past or present alcohol/drug abuse/dependency • May exacerbate depressive symptoms
Anticonvulsants	Carbamazepine	600-1000 mg	<ul style="list-style-type: none"> • Effective on B & D symptoms • Effective in Bipolar Affective Disorder 	<ul style="list-style-type: none"> • May produce neurological symptoms, low sodium, and blood abnormalities through bone marrow toxicity
	Valproate	750-1750 mg	<ul style="list-style-type: none"> • Effective on C & D symptoms • Effective in Bipolar Affective Disorder 	<ul style="list-style-type: none"> • May produce gastrointestinal problems and tremor

LEGEND: **B Symptoms:** intrusive recollection
C Symptoms: avoidant/numbing
D Symptoms: hyperarousal

Table continued on next page



Post-Traumatic Stress Disorder: Implications for Primary Care

117

continued

TABLE 4
EVIDENCE FOR EFFICACY OF MEDICATIONS IN THE TREATMENT OF PTSD
(Friedman, 2001)

Drug Class	Specific Medication	Daily Dose	Indications	Contraindications
Conventional Antipsychotics	Thioridazine Clozapine Risperidone	200-800 mg 300-900 mg 4-12 mg	<ul style="list-style-type: none">• Sedation, hypotension, & anticholinergic affects• Extrapyramidal effects (thioridazine, primaril)	<ul style="list-style-type: none">• Possible effectiveness on B & D symptoms• Effective Antipsychotic Agents

LEGEND: **B Symptoms:** intrusive recollection
 C Symptoms: avoidant/numbing
 D Symptoms: hyperarousal

Selective Serotonin Re-uptake Inhibitors (SSRIs), recommended as the first line treatment for PTSD, appear to mediate core PTSD symptoms, as well as depressive symptoms which commonly co-occur with PTSD and are effective for women, men and for combat veterans. If patients develop insomnia and/or agitation as a result of SSRIs, the next choice is to add trazadone at bedtime.

If there are still clinically significant symptoms after an 8-10 week trial of the SSRI at its optimal dose, it may be appropriate to request that a psychiatrist with expertise in the treatment of PTSD be involved in the psychopharmacologic management.

Start treatment with an antiadrenergic agent, such as clonidine or guanfacine, first, which may reduce hyperarousal, re-experiencing and dissociative symptoms, even among adults with complex PTSD, as a result of repeated sexual abuse during childhood. The advantage of using these agents is that the clinician can titrate the drug over the course of a week or two; it will be readily apparent (in a much shorter time than with an SSRI) whether this drug will work.

Other medications that are being utilized frequently for PTSD are nefazadone (Serzone), venlafaxine (Effexor) and valproate (Depakote), all well established as effective antidepressants.

One should remember, however, that **older antidepressants (e.g., tricyclic antidepressants, (TCAs) and monoamine oxidase inhibitors (MAOIs)** remain important options for patients who fail to respond favorably to SSRIs.



Post-Traumatic Stress Disorder: Implications for Primary Care

118

There is no evidence that benzodiazepines such as diazepam, alprazolam and clonazepam **are effective against core PTSD re-experiencing and avoidant/numbing symptoms.** They are effective as hypnotics and in reducing general anxiety, but such benefits must be weighed carefully against the proven superiority of other agents, as well as the abuse potential of such drugs among some individuals.

In the VA, pharmacotherapy is rarely used as a stand-alone treatment for PTSD; instead, it is combined with psychological treatment. In many cases, combined pharmacological and psychotherapeutic treatment for PTSD will be more effective than either treatment conducted alone.

One of the functions of medications is to make it possible for patients to participate in psychotherapy. If they are prescribed only to accomplish short-term symptomatic relief, patients may be encouraged to avoid addressing their trauma-related problems and may develop a substance abuse problem. Physicians should be alert to a possible higher rate of dropout from medical care due to medication side effects, and should take concrete steps to increase rates of compliance with medication. It should also be recognized that some individuals with long-standing chronic, severe and debilitating PTSD may not respond favorably to either medication or to psychotherapy.

Preventive Treatment Approaches

Early treatment following exposure to trauma may prevent development of PTSD in some persons. Brief (five-session) cognitive-behavioral-based treatment is significantly more preventive of PTSD than supportive treatment. The most widely used early intervention for trauma (other than general support and rest) is debriefing (or “critical incident stress debriefing”). Debriefing is usually a group process in which trauma survivors are led by a facilitator to review the facts, thoughts and emotions associated with their experience. While there is strong clinical consensus that it is a very helpful measure following a single-incident trauma, (especially for those who work with trauma survivors, such as firefighters or emergency room nurses), there is no good evidence that debriefing can prevent PTSD in those at high-risk for it (and some suggestion that it may worsen their symptoms). The limited evidence available, therefore, suggests that those at higher risk (e.g., those diagnosed with Acute Stress Disorder) are best treated individually with a more intensive treatment model.



Post-Traumatic Stress Disorder: Implications for Primary Care

119

How do Trauma-Related Symptoms affect Medical Compliance and Management?

Trauma survivors often exhibit poor self-awareness and self-care, as well as complex medical/psychological symptoms which may overwhelm them and make them less effective at managing their own health and well-being.

In addition, there are several aspects of the medical setting that may trigger trauma-related symptoms, including:

- invasive procedures (e.g., those performed in primary care, gynecology, ENT, gastroenterology, urology or dental clinics) can potentially trigger a post-traumatic reaction in patients who have experienced sexual trauma, or other invasive traumas (e.g., torture or traumatic injuries), and
- pelvic exams, colonoscopies, upper GI endoscopies, barium enema, oral instrumentation and other procedures that involve placing an instrument into a bodily orifice may be sufficiently reminiscent of the trauma to evoke a post-traumatic reaction.

A number of other features of the medical setting may also evoke trauma reminders.

- Being touched (even in a usually nonthreatening part of the body, e.g., inflating a blood pressure cuff or standing behind the patient to auscultate the lungs)
- The power differential (which can remind the patient of the power differential between him or her and the assailant)
- Being confined in a small enclosed space, (e.g., MRI)
- Having arms restrained (e.g., for minor surgery)
- Removal or absence of clothing
- Being in physical pain (e.g., as the result of a procedure, during wound debridement, or after a fracture) may also bring back memories of trauma
- If the patient was sedated by an assailant, medications used to treat pain or anxiety that have sedative side effects can remind the patient of the assault

In response to these features of poor self-care and aspects of the medical setting, trauma survivors may be likely to exhibit the following **avoidance symptoms**, such as:

- repeatedly canceling appointments.
- avoiding telling providers about symptoms.



Post-Traumatic Stress Disorder: Implications for Primary Care

120

Trauma survivors also may exhibit **dissociative symptoms**, which are usually triggered by a strong emotional reaction (i.e., terror, surprise, helplessness, shame or feeling trapped or exposed), such as:

- altered awareness or attention (which looks like “spacing out,” or appearing unresponsive)
- flashbacks (the patient may experience herself to be back in the scene of the trauma, and unaware of her surroundings or of the provider’s presence, such as sobbing uncontrollably)
- out of body experiences (e.g., feeling unreal, looking down on the scene from above or feeling as if not in their body)
- assuming different identities, as is seen in dissociative identity disorder (formerly referred to as multiple personality disorder), such as speaking in a child’s voice about topics unrelated to the examination

How can the Primary Care Clinician Improve Medical Compliance and Management in Patients with Trauma Symptoms?

In addition to knowing about your patient’s history, there are a number of things you can do to make it more likely to have the patient successfully complete an exam or invasive procedure with as little emotional distress as possible, and increase the likelihood that care will be not be avoided in the future:

A. Normalize the patient’s concerns

- Explain that many of your patients who have had traumatic experiences find that medical procedures can be stressful for them.
- Ask the patient what is likely to help make the procedure easier to tolerate.

B. Reduce the power differential between you and your patient

- Greet the patient in your office (not the exam room) while he or she is still fully dressed.
- Give the patient as much control as possible, offering options (e.g., timing of the procedure, type of anesthesia and whether a friend will be present for the procedure).
- Provide health education materials.
- View the patient as an expert about him or herself. Ask what would be most likely to help reduce his or her stress during the exam.



Post-Traumatic Stress Disorder: Implications for Primary Care

121

- Ask the patient to predict what will be the most difficult parts of a procedure.
- Take a break, if necessary.

C. Engage in dialogue throughout exam

- Explain everything you do in advance and as you are doing it.
- Listen carefully to any concerns.
- Check in regularly about the patient's level of anxiety.
- Remind the patient why you are doing this exam.

D. Plan ahead

- Allow extra time by scheduling these patients for slower days.
- Be prepared and willing to reschedule the exam, if necessary.
- Use distraction during the procedure.
- Consider using relaxation techniques (though for some trauma survivors this is contraindicated).
- Involve a mental health provider in planning care; the mental health provider can work with the patient around identifying specific fears about the procedure and developing coping strategies that will help him or her get through the procedure.

E. Respect the patient's wishes

- If the competent patient declines a procedure, respect his or her wishes.
- Explore specific concerns to see if misunderstandings can be resolved, and offer the option of having the procedure at a later date.
- If the patient asks that an examination be stopped, do so immediately.
- While a patient may need encouragement and support in order to be able to go through with a procedure, the patient should not be coerced; to do so would put him or her at risk for re-traumatization.



Post-Traumatic Stress Disorder: Implications for Primary Care

122

What can a Primary Care Clinician do if Post-Traumatic Symptoms Occur during an Exam?

The following techniques may be helpful in addressing trauma-related symptoms that arise acutely while performing a medical procedure:

- Speak in a calm, matter-of-fact voice and avoid sudden movements.
- Reassure your patient that everything is okay.
- Continue to explain what you are doing.
- If at all possible, stop the procedure.
- Ask (or remind) the patient where he or she is.
- Re-focus the patient to the present setting. Remind him or her that you are in a doctor's office, that he or she is safe and that he or she is having a medical procedure to help him or her get better.
- Offer the patient a drink of water, an extra gown, or a warm or cold wash cloth for the face—anything that will make the patient feel more like his or her usual self.
- Provide a change of environment.
- Seek assistance from family members, other staff and/or mental health consultation.

What are Some Potentially Difficult Boundary Problems with Trauma Survivors?

It is important for the primary care provider to realize that **the veteran's stagnation, regression and/or negative behavior in his or her progress or treatment is not necessarily a negative reflection on the provider or staff** and to make every attempt to understand these behaviors in the context of the patient's trauma history.

One of the ways that a primary care provider can more effectively manage patients with a trauma history is to maintain healthy boundaries. **Boundaries can be defined as the appropriate interpersonal distance (especially emotional distance) between patients and health care providers.** Health care providers need to make it clear that they have a professional (not personal) relationship with the patient, while at the same time maintaining a caring, empathic stance.



Post-Traumatic Stress Disorder: Implications for Primary Care

123

Common situations in which a clinician might cross a boundary are:

- Being a “friend.” The patient may ask the physician to:
 - disclose personal information
 - raise issues unrelated to his/her medical care
 - call the physician by his/her first name
 - give the physician gifts

Why is this a problem?

Patients may become frightened about:

- whether their medical problems are going to be addressed, and
- the lack of distance between patient and provider.

Physicians may:

- lose objectivity in the patient’s care,
- worry about the care they are providing to the patient, and
- face malpractice litigation around nonstandard practices.

What could a provider say?

- *“Thank you very much for your concern for my family, but my priority is to care for YOU. Let’s talk about your symptoms.”*
- *“I am concerned that if we talk a lot about the ball game, we won’t do justice to your medical issues. Let’s move on to those.”*
- *“I appreciate your generosity in wanting to give me a gift, but my professional society urges me not to accept gifts from patients. It is my pleasure to always give you the best care that I can, and you never need to give me any gift to assure that I will do so.”*

- Being a “rescuer.” The needy patient may want the physician to deviate from standard practice by:
 - seeing the patient after hours
 - extending the clinic visit longer than the scheduled length
 - advising the patient in the hallway or at a social event
 - asking for a treatment that the physician does not feel comfortable prescribing



Post-Traumatic Stress Disorder: Implications for Primary Care

124

Why is this a problem?

- Clinicians raise patient expectations by making the patient feel that they are indeed “better than the rest.”
- When the clinician fails to achieve this unrealistic standard, the patient is likely to feel betrayed and may retaliate against the clinician or terminate the relationship.
- The clinician, too, may feel betrayed and abandon the patient or retaliate in some other way.
- The provider also may experience burnout, at which point he/she does neither his patient nor himself any good.

What could a provider say?

- *“It sounds like there are several issues that we need to address. Because we only have 20 minutes for our visit today, we will not be able to address them all in one visit. Let’s identify the two highest priority items that you want to be sure we cover today, and then schedule a follow-up visit in a short interval so we can continue working through this list of important issues.”*
- *“Standing here in the hallway, I am not going to be able to evaluate this new symptom of yours properly. Can you please call the clinic clerk to set up a time for us to discuss it by phone this afternoon? During that conversation, we can determine how soon you should come in to the office to be evaluated for this problem.”*
- *“Thank you for suggesting that I am the best doctor in town. I try very hard to do a good job for all of my patients. However, no one is perfect, and I am sure there will be times that I do not meet your expectations. I hope that you will let me know when this happens, so we can keep our communications open and honest.”*
- Seeking a “romantic attachment.”
 - The patient may exhibit seductive behaviors toward the physician.
 - A clinician may experience sexual feelings in relation to a patient.

Why is this a problem?

The patient is at great risk of:

- being harmed by the power differential in the patient-provider relationship.
- potentially repeating the pattern of exploitation he/she experienced in the past.



Post-Traumatic Stress Disorder: Implications for Primary Care

125

The physician is at risk of:

- loss of licensure,
- loss of standing in the medical community, and
- personal feelings of worry and shame.

What could a provider say?

- *“My code of ethics does not allow me to enter into a romantic relationship with a patient. It is a very strict rule. However, I would like to continue working with you professionally around your medical problems. Will you be comfortable with that?”*

While minor boundary crossings such as discussing last night’s ball game may be appropriate (e.g., to help the patient relax and establish a connection with the patient), a careful balance must be struck when caring for patients who have particular difficulty with interpreting interpersonal boundaries accurately. Small boundary crossings early in a patient-provider relationship can gradually escalate over time, leading them down a slippery slope towards increasingly serious boundary violations.

What can Clinicians do to Prevent Harmful Boundary Crossings?

Be on the lookout for them. Such feelings could include:

- pride about being able to provide “better” care than anyone else,
- anxiety about the patient’s welfare,
- frustration or a sense of being overwhelmed whenever seeing the patient, or
- sexual attraction toward the patient.

Feelings like these are clues that boundary crossings could be occurring, although they also can occur in the absence of boundary crossings.

- Seek permission before touching the patient, even for routine elements of the physical examination.
- Communicate the professional nature of the relationship (e.g., through use of surnames, use of chaperones during sensitive examinations and avoidance of self-disclosure).
- Set limits up front. Explain standard protocol to the patient and adhere to it. These explanations need to be approached empathically and non-judgmentally, but directly. The ideal is to establish ground rules early in a relationship, so that the patient has appropriate expectations.



Post-Traumatic Stress Disorder: Implications for Primary Care

126

- Re-negotiate expectations. Upon recognizing that an undesirable pattern of interactions is occurring, it is helpful for the provider to:
 - meet with another clinician(s) to review the problem and brainstorm about what can be done,
 - discuss the issue with the patient,
 - re-negotiate how future interactions will occur,
 - write down new ground rules for the patient, and
 - have a written “contract” with the patient that is signed by both patient and provider, for more refractory problems.
- Work with the patient’s mental health provider. The mental health expert can:
 - help clinicians understand their own feelings and
 - help patients learn new coping styles that will assist them in establishing healthy, interpersonal distance

What do Primary Care Clinicians need to know about the Compensation-Seeking Veteran with PTSD?

Because many veterans with PTSD are more likely to report to primary care than mental health, the primary care provider can have significant impact on the veteran’s likelihood of receiving compensation for trauma-related symptoms.

Background:

- Approximately 40% of potentially eligible Vietnam veterans have applied for compensation or VA medical treatment for PTSD.
- Of those veterans who apply for PTSD compensation, 53% of initial claims established service-connected PTSD.

Compensation can be paid to veterans any time after their military service if three conditions are satisfied:

- a traumatic event occurred during military service, and
- a compensable mental or physical disorder is diagnosed, and
- a credible link between the disorder and the traumatic event is established.



Post-Traumatic Stress Disorder: Implications for Primary Care

127

Since normal life span events, such as retirement or major illness, can either trigger quiescent PTSD or exacerbate existing PTSD, it is likely that, as the veteran population ages, more and more veterans with newly-diagnosed PTSD will come into contact with primary care providers.

The Compensation and Pension Process:

To receive disability benefits, the veteran must provide reasonably credible evidence that the trauma occurred during military service. The primary care provider can assist his or her patient's quest for compensation by:

- carefully documenting in the medical chart any signs, symptoms and behaviors that might support (or not support, if appropriate) a diagnosis of PTSD, as well as any historical information that the patient offers about his or her trauma,
- documenting the veteran's social and occupational capacity, which can help establish his or her level of disability, and
- providing the patient with contact information for their local veteran's service organization or compensation and pension coordinator.

Primary care providers should counsel their patients about the stressful nature of the compensation and pension process, which involves repeated revisiting of traumatic experiences, and should encourage their patients to establish a stable, therapeutic relationship with a mental health provider before they pursue a disability claim. A veteran's physical symptoms also may flare during a C & P process. The primary care provider should consider offering more frequent follow-up visits during the C&P process.

Compensation and Pension for Sexual Assault

In addition to medical benefits through VHA, veterans suffering disabling symptoms from sexual assault or domestic violence experienced while on active military duty may be eligible for monetary compensation benefits from the Veterans Benefits Administration (VBA).

All medical centers are required to have a designated military sexual trauma (MST) coordinator tasked with ensuring that this screening takes place and is documented, developing local implementation guidelines and identifying treatment resources.

When addressing women veterans with sexual trauma history, most VA's have at least one person (the "women veterans' coordinator") specially trained not only in the particularities



Post-Traumatic Stress Disorder: Implications for Primary Care

128

of developing sexual trauma claims, but also in dealing sensitively with the concerns and discomforts veterans commonly experience during the claims process.

VA providers who would like more information about women's health programs within VHA can access the VA Intranet at vawww.sites.Irn.va.gov/wvhp. Information about the Center for Women Veterans is listed at www.va.gov/womenvet.

What are the Advantages of Integrating Behavioral Health Care for PTSD in Primary Care Settings?

Some VA facilities have mental health providers fully integrated into primary care teams. Increasing behavioral health services for PTSD in primary care settings may address the fact that:

- 70% of all primary care visits have a psychosocial component, and
- two-thirds of psychoactive agents are prescribed by a primary care provider, even more for antidepressant agents.

The benefits of integrating primary care and behavioral health include the following:

- improved screening of all behavioral health conditions,
- improved primary care provider skills in identifying mental health conditions and prescribing psychoactive medication,
- increased patient adherence to medication,
- reduced premature drop-out rates from treatment regimens,
- improved clinical outcomes,
- improved self-management skills,
- better treatment outcomes than treatment in separate primary care or behavioral health settings, and
- improved provider and veteran satisfaction with services.

The primary goals of a fully-integrated behavioral health care model are for the behavioral health professional to act as an on-site consultant to the health care team. The behavioral health professional supports the primary care provider's decision making on behavioral health issues and teaches the team "core" behavioral health skills. Patients are educated in self-management skills that are practiced between brief sessions. Finally, patients who are most "at risk" are monitored by both primary care and behavioral health for possible referral to specialty behavioral health settings, as necessary.



APPENDIX C

Information Sheet: Understanding Trauma and PTSD

What are Traumatic Events?

Traumatic events are events that cause a person to have the experience that he or she may die or be seriously injured or harmed. These events also can be traumatic when the person witnesses them happening to others. Such events often create feelings of intense fear, helplessness or horror for those who experience them.

Among the common kinds of traumatic events are:

- combat in the war zone,
- rape and sexual assault,
- natural disaster (for example, hurricanes, floods or fires),
- child physical and/or sexual abuse,
- domestic violence (battering),
- motor vehicle accidents,
- exposure to the sudden or unexpected death of others, and
- sudden life-threatening physical illness (e.g., heart attack or cancer).

One of the biggest reasons that many veterans seek treatment for PTSD is to improve relationships with family and friends.

Common Effects of Trauma

For many veterans, traumatic experiences during military service cause a set of reactions or symptoms called “Post-Traumatic Stress Disorder” or “PTSD.” There are 17 different PTSD symptoms (many people have only some symptoms, not all) that are described below (points 1-4). In addition to PTSD, many other problems can result from trauma, and some of these are also noted below (points 5-8).

While reviewing the list of effects of trauma below, keep in mind several facts about trauma and its effects.



Post-Traumatic Stress Disorder: Implications for Primary Care

130

- Trauma happens to many able, healthy, strong and good people. No one can prevent all trauma from happening.
- It is very common to have long-lasting problems following exposure to trauma; up to 8% of Americans will have PTSD at some time in their lives. About one in three male Vietnam combat veterans have had PTSD at some time in their lives.
- Veterans with PTSD often worry that they are going crazy. This is not true. Rather, what is happening is that they are experiencing a set of common symptoms and problems that are connected with trauma.
- Problems that result from trauma are not a sign of personal weakness. Many mentally and physically healthy people develop PTSD. Given exposure to very traumatic experiences, probably most people would develop PTSD.
- By understanding their symptoms better, veterans can become less fearful of them and better able to cope with them.
- By recognizing the effects of trauma, and knowing more about symptoms, trauma survivors will be better able to decide about getting further treatment.

Traumatic experiences happen to many of us and often cause many of the following kinds of problems for veterans:

1. Unwanted remembering: “Re-experiencing” symptoms

Difficulty in controlling distressing memories of the traumatic event(s) is experienced by almost all trauma survivors. The experience of these memories can include:

- unwanted distressing memories as images or other thoughts,
- feeling like it is happening again (“Flashbacks”),
- dreams and nightmares,
- distress when reminded of the trauma, and
- physical reactions (e.g., heart pounding or shaking) when reminded of the trauma.

Although these memories are upsetting, on the positive side, these memories mean that a person is trying to make sense of what has happened in order to gain mastery over the event.



Post-Traumatic Stress Disorder: Implications for Primary Care

131

2. Physical activation: “Arousal” symptoms

The body’s “fight-or-flight” reaction to a life-threatening situation continues well after the event itself. Signs of continuing physical activation, so common following a traumatic experience, can include:

- difficulty falling or staying asleep,
- irritability, anger and rage,
- difficulty concentrating,
- remaining constantly on the lookout for danger (“hypervigilance”),
- being startled easily; for example, when hearing a loud noise (“exaggerated startle response”), and
- anxiety and panic.

It is upsetting to have one’s body feel like it is over-reacting or out of control. Again, on the positive side, these fight-or-flight reactions help prepare a person in a dangerous situation for quick response and emergency action.

3. Active avoidance of trauma-related thoughts and feelings

Painful memories and physical sensations of fear and activation can be frightening. It is only natural, then, to try and find ways to prevent them from happening. One way that most veterans try is to avoid anything – people, places, things, conversations, thoughts, emotions and feelings and physical sensations – that might act as a reminder of the trauma. This works in some ways, and can be very helpful if it is used once in a while (e.g., avoiding upsetting news or television programs). But if used too much, it can have two big negative effects. First, avoidance can reduce trauma survivors’ ability to live their lives and enjoy themselves, because they can become more and more isolated and limited in where they can go and what they can do. Second, avoiding thinking and feeling emotions connected with the trauma may reduce veterans’ abilities to recover from it. It is through thinking about what happened, and particularly through talking about it with trusted others, that survivors may best deal with what has happened. By constantly avoiding thoughts, feelings and discussions about the trauma, this potentially helpful process is short-circuited.

The veteran with PTSD will need to care for his or her health, seek medical care when appropriate and inform the doctor or nurse about past traumas, in order to limit the effects of the trauma.



4. Shutting down: Emotional numbing

When overwhelmed by strong emotions, the body and mind sometimes react by shutting down and becoming numb. The trauma survivor may find this numbness strange or upsetting. He or she may, as a result, be unable to have loving feelings or feel some emotions. He/she may feel less and less interest in participating in daily activities. Like many of the other reactions to trauma, this emotional numbing reaction is not something the veteran is doing on purpose, and he or she can not control it. It may help protect the veteran from emotional and physical pain.

5. Depression

Most persons who have been traumatized experience strong feelings of depression. Feelings of depression then lead a person to think very negatively and feel hopeless. There is a sense of having lost things: one's previous self ("I'm not the same person I was."), sense of optimism and hope, self-esteem and self-confidence. With time, and sometimes with the help of counseling, the trauma survivor can regain some of his or her self-esteem, self-confidence and hope. It is important to let others know about feelings of depression, and of course about any suicidal thoughts and feelings that are sometimes part of feeling depressed.

6. Self-blame, guilt and shame

Many veterans, in trying to make sense of their traumatic experience, blame themselves for getting traumatized, for what they did or did not do during the traumatic event or for other things. Self-blame causes much distress, and can prevent a person from reaching out for help. Therefore, despite feelings of shame, it is very important to talk about guilt feelings with a counselor, doctor or someone else who is knowledgeable about trauma and in a position to help.

Unfortunately, parts of our society sometimes take a "blame-the-victim" attitude toward the survivor of some types of trauma (e.g., sexual assault survivors and combat veterans), and this is wrong. It is important to state clearly that no one ever deserves to be traumatized or to develop PTSD, no matter what he or she has done or not done.

7. Interpersonal effects of trauma

Not surprisingly, the many changes noted above can affect relationships with other people. Trauma may cause difficulties between a veteran and his or her partner, family, friends or co-workers. First, others may respond in ways that worsen the problem rather than help



Post-Traumatic Stress Disorder: Implications for Primary Care

133

recovery. They may become angry, blame the survivor, minimize his or her problems, communicate poorly and/or fail to provide support. Second, some common reactions to trauma may increase conflict with others. The veteran who is experiencing high levels of irritability and anger may now have more conflicts and handle them less well. Third, particularly in close relationships, the emotional numbing and feelings of disconnection from others that are common after traumatic events may create distress and drive a wedge between the survivor and his or her family or close friends. Fourth, the avoidance of different kinds of social activities by the survivor may annoy others. Sometimes, this avoidance results in social isolation that hurts relationships. Finally, some kinds of traumatic experiences (for example, rape, child physical or sexual abuse or criminal victimization) often make it hard to trust other people, and this trust problem can affect the survivor's ability to get close to others and to trust counselors and others on whom he or she must rely for help.

These problems in relationships are upsetting. Just as the veteran needs to learn about trauma and its effects, other people who are important to him or her will need to learn more. As the survivor becomes more aware of trauma reactions and how to cope with them, he or she will be able to reduce the harm they cause to relationships. One of the biggest reasons that many veterans seek treatment for PTSD is to improve relationships with family and friends.

Knowing how recovery happens puts the veteran in more control of the recovery process.

8. Physical symptoms and health problems

Among the reactions to the trauma must be included physical health symptoms and problems. Because many traumas result in physical injury, pain is often part of the experience of survivors. This physical pain often causes emotional distress, because in addition to the fact that it hurts, it also reminds them of their trauma. Because emotions affect physical health, stress-related physical symptoms (such as headaches, nausea or other stomach problems, or skin problems) may be experienced by survivors. The veteran with PTSD will need to care for his or her health, seek medical care when appropriate and inform the doctor or nurse about his past traumas, in order to limit the effects of the trauma. He or she will need to resist the impulse to avoid medical examinations; although these may sometimes act as trauma reminders, they are very important to self-care. Often, treatment for PTSD can improve physical symptoms and health.



Post-Traumatic Stress Disorder: Implications for Primary Care

134

Coping with Effects of Post-Traumatic Stress

Because PTSD and other trauma-related problems are intense and distressing, many people have strong reactions to their symptoms, which can include:

- fear of symptoms: “I feel like I’m back in the trauma situation again.”
- difficulty in understanding what is happening
- “Thinking I’m crazy.”
- “Thinking I’m the only one suffering like this.”
- shame about symptoms: “I shouldn’t be having these problems.”
- extreme efforts to avoid symptoms (for example, staying in the house all the time)
- alcohol and drug use
- social isolation
- not knowing how to recover

How veterans respond to their symptoms is important, because some ways of coping with trauma symptoms can lead to more problems, such as:

- alcohol and/or drug use, which causes more problems than they cure.
- social isolation, which means loss of support, friendship and closeness with others, and more time to worry or feel hopeless and alone.
- less participation in everyday activities, which leads to less opportunity to feel good and feel a sense of achievement.
- anger, which helps keep other people away and may keep bad emotions away. But it also keeps away positive connections and help.
- avoidance of thinking about trauma or seeking treatment, which keeps away distress but prevents progress on coping with trauma and its effects.

Importance of Active Coping

- When veterans take direct action to cope with PTSD and other trauma-related problems, they put themselves in a position of power and start to be less helpless.



Post-Traumatic Stress Disorder: Implications for Primary Care

135

- Active coping means recognizing and accepting the impact of trauma on the survivor's life, and taking direct coping action to improve things.
- It means actively coping, even when there is no crisis; coping is an attitude of mind and a habit that must be strengthened.

Positive coping actions are those which help to reduce anxiety, lessen symptoms and improve the situation in a way that does not harm the veteran further and which improves things not only today, but tomorrow and later. These actions are taught in PTSD treatment and can include:

- identification and recognition of trauma “triggers” and problems,
- basic skill for emotional pain (e.g. talking to another human being about current problems and feelings),
- relaxation/exercise,
- positive distraction (doing something pleasant and healthy to take your mind off the memory), and
- support group/therapy participation.

Negative coping methods reinforce problems. They reduce distress immediately but short-circuit more lasting change. Actions that are immediately effective but cause later problems can be addictive, such as smoking or drug use. These habits can become difficult to change and can include:

- isolation,
- drugs/alcohol,
- violence,
- anger,
- eating, and
- self-destructive behavior (hurting or cutting oneself or attempting suicide).

When distressing symptoms happen, it is easy to react automatically. In order to build recovery, reactions must become more thoughtful, less impulsive and more positive. This takes practice and support from others and involves making mistakes as well as having successes. Helpful ways of changing the routine of coping include:



Post-Traumatic Stress Disorder: Implications for Primary Care

136

- learning about trauma, PTSD and coping,
- becoming educated about related problems – alcohol and drug use, social isolation, anger and avoidance – and ways of coping with them,
- taking classes to learn better coping tools,
- joining support groups to learn and support use of positive coping, and
- participating in psychological therapy.

Understanding the Recovery Process

Knowing how recovery happens puts the veteran in more control of the recovery process.

- Recovery is an ongoing, daily process. It doesn't happen through being suddenly "cured."
- Some amount of continuing symptoms is normal and reflects a normal body and mind. Healing doesn't mean forgetting traumatic experiences or having no emotional pain when thinking about them.
- Healing may mean fewer symptoms and less disturbing symptoms, greater confidence in the ability to cope with your memories and symptoms and/or improved ability to manage emotions.

Importance of Talking about Traumatic Experiences

- When veterans are able to talk about their painful experiences and memories, something helpful often results.
- Benefits of talking do not usually result from just one discussion; usually, they result from many discussions of the trauma.
- Through talking about trauma, many people can gradually reduce their physical reactions (for example, pounding heart) to the memories and increase their ability to deal with their painful emotions.
- Avoidance of memories may actually be maintaining symptoms and problems. Running from something gives it great power. If trauma survivors consistently avoid thinking about what happened, they can not learn to deal with their emotions better.



Post-Traumatic Stress Disorder: Implications for Primary Care

137

- One place to talk through traumatic experiences is formal trauma counseling or treatment. The VA has specialized PTSD treatment services where this kind of counseling is available.

Importance of Re-thinking Trauma Beliefs and Attitudes

- People think about and try to make sense of their traumatic experiences. They draw conclusions and form beliefs about themselves, their actions, the causes of the traumatic event, other people, their life in the future, and so on.
- Beliefs and attitudes can help or hurt recovery.
- Negative trauma-related beliefs cause continuing distress. Examples:
 - “I am (weak, bad, worthless, evil, a failure or “less than”).”
 - “I am the one to blame for what happened.”
 - “My life is ruined forever.”
 - “People can’t be trusted.”
- Negative beliefs can interrupt healthy coping. They can interrupt getting support from others; they can interrupt sharing feelings and thoughts.
- Beliefs are not the same things as facts. Through talking with a counselor, it may be possible to re-think judgments and interpretations that are connected with the traumatic experience.

Importance of Social Relationships in Building a Life after Trauma

Traumatic events often cut the veteran off from other people for several reasons, including:

- emotional numbing and lack of having feelings for others,
- feeling different from other people whom they can not understand,
- feeling angry and blowing up at others,
- feeling afraid of anger and avoiding others in order not to harm them,
- becoming socially isolated,
- when there is reduced contact with others, there can be a loss of friendship, social support and opportunity for recreational activities, all of which are important to recovery,



Post-Traumatic Stress Disorder: Implications for Primary Care

138

- social isolation can create opportunities for negative thinking,
- in reconnecting with others, the effects of trauma on social relationships are resisted, and
- sometimes, it can be especially helpful to talk to other veterans who have survived similar kinds of traumatic experiences.

Role of Treatment

- When PTSD and other trauma-related problems have lasted for several years, they usually do not go away on their own. They must be tackled directly, with professional help.
- Professional trauma counselors can sometimes provide a safe place to talk about things that may be difficult to tell to others.
- Some, but not all, mental health professionals are familiar with treatment methods that have been found successful in treating PTSD. To locate these professionals, talk to your doctor and contact your VA to find local specialized PTSD programs or Vet Centers.
- It often is helpful for veterans with PTSD to attend groups where they can meet and listen to other trauma survivors. This can be a very helpful experience in which they can learn what is working for others and share their experience and lessons with others. Often, these groups are led by professional counselors.

Role of Medications in Recovery

- Trauma has biological stress effects on the survivor. Sometimes, medications can help improve sleep, depression, irritability, anxiety and other symptoms.
- Medications can never replace treatment. Rather, they can help add to the effectiveness of treatment if carefully prescribed and monitored by a doctor.
- Medications can become one kind of coping tool used by the veteran, along with other kinds of tools (for example, talking, exercise and group support).

Prepared by the National Center for PTSD for the Employee Education System and the Office of Public Health and Environmental Hazards, Department of Veterans Affairs.



APPENDIX D

Screening Tools

Several screening tools have been advocated for use with veterans in the primary care setting:

- 1. Primary Care PTSD Screen (PC-PTSD;** Prins, Kimerling, Cameron, Oumiette, Shaw, Thrailkill, Sheikh & Gusman, 1999): To date, over 200 male and female VA patients have completed the screen and participated in a diagnostic interview two weeks later. Internal consistency ($KR20 = .79$) and test-retest reliability ($r = .84$) of the PC-PTSD are good. The operating characteristics of the screen suggest that the overall efficiency (i.e., optimal sensitivity and specificity) is best when any two items are endorsed OR when the item “constantly on guard, watchful, or easily startled” is endorsed (.87 and .80, respectively).

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you...

- | | | |
|-----|----|--|
| YES | NO | 1. Have had nightmares about it or thought about it when you did not want to? |
| YES | NO | 2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it? |
| YES | NO | 3. Were constantly on guard, watchful, or easily startled? |
| YES | NO | 4. Felt numb or detached from others, activities, or your surroundings? |

Scoring: Current research suggests that, if a patient endorses *any* two items or the single hyper-arousal item (#3), referral to a mental health professional for further evaluation and treatment of probable PTSD should be considered.



Post-Traumatic Stress Disorder: Implications for Primary Care

140

2. VA Major Depressive Disorder Clinical Practice Guidelines for Depression PTSD Screen (<http://www.va.gov/HEALTH/mdd.hlp>; Mental Health Strategic Healthcare Group and Major Depressive Disorder Working Group, 1997): The VA practice guidelines for management of depression in primary care include a four-item screen for PTSD. Currently there is no information available on its operating characteristics or clinical utility. The instrument is as follows:

I. Some people have had terrible experiences that others never go through, such as:

- Being attacked
- Being sexually assaulted or raped
- Being in a fire or flood or natural disaster
- Being in combat
- Being in a bad accident
- Being threatened with a weapon
- Seeing someone being badly injured or killed

YES NO Did any of these experiences happen to you?

If you answered “no” to question I, skip questions II, III, IV.

YES NO II. In the past month, have you been bothered by repeated, disturbing memories, thoughts, or images of one or more of the stressful events you experienced above?

YES NO III. In the past month, have you felt distant or cut off from other people?

YES NO IV. In the past month, have you been “super alert” or watchful or on guard?

Scoring: If patient answers affirmatively to question 1 and endorses ONE of the subsequent questions (items 2, 3, or 4), refer to a mental health professional for further evaluation and treatment of probable PTSD.



Post-Traumatic Stress Disorder: Implications for Primary Care

141

- 3. PTSD Brief Screen** (Leskin & Westrup, 1999): The PTSD Brief Screen was developed using a rationally derived approach using data from the National Comorbidity Survey. Construct validity has generally been adequate. The overall efficiency of this screen was good (.78). The items on this screen correlated very highly with PTSD diagnosis (.48), whereas the correlations were significantly lower or negative for other mental disorders indicating good construct validity.

In your life, have you ever had an experience that was so frightening, horrible or upsetting, that, in the past month, you....

- | | | |
|-----|----|--|
| YES | NO | 1. Kept thinking about the event? |
| YES | NO | 2. Tried hard not to think about the event? |
| YES | NO | 3. Became upset when people, places or things reminded you of the event? |
| YES | NO | 4. Tried to avoid anything that reminded you of the event? |

Scoring: If an individual endorses two or more items on this screen, referral for additional assessment or treatment should be considered.

- 4. Trauma Screening Questionnaire** (McIntyre, et al., 1999): The Trauma Screening Questionnaire is a 10-item self-report questionnaire that assesses a woman's history of childhood and adult sexual trauma, sexual harassment and domestic violence. It was developed for use in a veteran population, and for three items, assessment of whether trauma occurred in the military is made. Construct validity has generally been good to excellent, with no systematic bias on the questions. Specificity and sensitivity is good, except for questions dealing with desire for mental health referral. Subjects requested a mental health referral more frequently in a clinical interview than with the questionnaire.



Post-Traumatic Stress Disorder: Implications for Primary Care

142

TRAUMA SCREENING QUESTIONNAIRE

Some women experience traumatic events during their military service. We are trying to find out about these events and how they affect women's lives. We also want to find out if veteran women want mental health help addressing these or other concerns. To answer a question, please check "yes", "no", or "don't know." Thank you for your time.

- | | | | |
|-----|----|------------|--|
| YES | NO | DON'T KNOW | 1. Have you ever been involved in a major accident or disaster? |
| YES | NO | DON'T KNOW | 2. Have you ever been physically assaulted or been a victim of violent crime? |
| YES | NO | DON'T KNOW | 3. At any time, has a spouse or partner (significant other) ever threatened to physically hurt you in any way? |
| YES | NO | DON'T KNOW | 4. At any time, has a spouse or partner (significant other) ever hit you, kicked you, or physically hurt you in any way? |
| YES | NO | DON'T KNOW | Did this happen while you were in the military? |
| YES | NO | DON'T KNOW | 5. Have you ever received uninvited and unwanted sexual attention (e.g., touching or cornering, pressure for sexual favors, verbal remarks)? |
| YES | NO | DON'T KNOW | Did this happen while you were in the military? |
| YES | NO | DON'T KNOW | 6. Has anyone ever used force or the threat of force to have sex with you against your will? |
| YES | NO | DON'T KNOW | Did this happen while you were in the military? |
| YES | NO | DON'T KNOW | 7. Were you ever sexually assaulted or touched in a sexual way, by a person 5 or more years older than you, when you were younger than 13? |



Post-Traumatic Stress Disorder: Implications for Primary Care

143

- | | | | |
|-----|----|------------|--|
| YES | NO | DON'T KNOW | 8. Would you like to talk to a mental health worker about any of the above problems? |
| YES | NO | DON'T KNOW | 9. Do you have any mental health questions or concerns that are not on this questionnaire? |
| YES | NO | DON'T KNOW | 10. Would you like to talk to a mental health worker about any of these other problems? |

Data-based discussions of PTSD screening with civilian populations include:

Breslau, N., Peterson, E.L., Kessler, R.C., & Schultz, L.R. (1999). Short screening scale for DSM-IV Post-traumatic Stress Disorder. *American Journal Of Psychiatry*, 156, 908-911.

Stein, M.B., McQuaid, J.R., Pedrelli, P., Lenox, R., & McCahill, M.E. (2000). Post-traumatic stress disorder in the primary care medical setting. *General Hospital Psychiatry* 22, 261-269.



This form may be used for additional copies.

Screening Questionnaire

Thank you for answering the following questions.

(Please circle your answers)

In your life, have you ever had any experience that was so frightening, horrible or upsetting that, in the past month, you

1. have had nightmares about it or thought about it when you did not want to?

Yes

No

2. tried hard not to think about it or went out of your way to avoid situations that reminded you of it?

Yes

No

3. were constantly on guard, watchful or easily startled?

Yes

No

4. felt numb or detached from others, activities or your surroundings?

Yes

No

Name: _____ Date: _____

SSN: _____



APPENDIX E

Patient Protection and Advocacy

In all states, there are mandatory reporting laws for child abuse. This covers all children, with or without disabilities, to age 18. In all states but seven, there are mandatory laws for reporting abuse of “dependent adults” and the elderly. Dependent adults are defined as those between ages 18-64 who, due to disability, require assistance and supervision for their continued health and safety.

In general, mandated reporters include any and all personnel whose jobs are related to childcare activities or work with “vulnerable adults.” Those include volunteers, paraprofessionals and grounds personnel, as well as direct care staff, teachers, vocational supervisors and medical personnel. Typically, reporting is voluntary for parents, neighbors, friends or acquaintances; in short, those without an employment or fiscal responsibility to the dependent individual.

In most cases, mandatory reporters must provide their name and agency affiliation when reporting, although this information may not be shared with anyone who does not have an investigatory responsibility or role. Voluntary reporters may report anonymously. Failure to report suspected abuse properly can result in fines or imprisonment for mandatory reporters.

When Should You Report?

You should report when you have a valid suspicion of abuse or neglect. Your suspicion would be based on tangible evidence, the child’s or adult’s statement, your observation of behavioral, physical or psychological cues, as well as your “gut feeling.” You do not have to prove abuse or “make sure” it exists before you report. You are not an investigator. The authorized investigator has the job of determining whether abuse has occurred and whether intervention is indicated.

Many people are unclear on this issue, and fail to report at the “suspicion” level. C. Henry Kempe said it best when he advised to “err on the side of protecting the person rather than risk the death or continued abuse of the victim” by our silence.

To Whom do You Report?

If the suspected abuse victim is a child, you may report to Child Protective Services or the local law enforcement agency (police, county sheriff, etc.). Usually these are the only two agencies authorized to receive and respond to suspected abuse reports for children. If the suspected abuse victim is a “vulnerable adult,” between 18 and 64 years of age, Adult



Post-Traumatic Stress Disorder: Implications for Primary Care

146

Protective Services, in addition to the local law enforcement agency, are the authorized agents to receive and respond to suspected abuse reports.

What Should be Reported?

When there is a suspicion that abuse of some kind may be occurring, it should be reported. The abuse may take the form of a one-time occurrence or a pattern of abusive acts. The following should be reported:

Physical abuse: when you notice an indication of excessive physical abuse of a child or “vulnerable adult.” This may be apparent from marks you see on their body, having heard or seen a pattern of physical altercations or the person’s own report.

Sexual abuse: any sexuality with a child or a “vulnerable adult” is considered abusive. This includes overt sexual behavior by an adult or older child that is intended to provide either sexual gratification of the abuser, or gratification of achieving a sense of power and control over another, using sex as the medium. This includes kissing, fondling, sexual intercourse and oral sex, among other behaviors. In addition, the person or child might be used by taking photographs of them, forced nudity, prostitution or other sexual coerced conduct.

Emotional/verbal abuse: using the abuse definitions for your state, this generally refers to a pattern of verbal assaults upon a child which is designed to “put down,” humiliate or otherwise psychologically ignore the child.

Severe neglect: a pattern of failing to adequately provide for the physical, mental, medical or emotional/social needs of a child.

It is important to note that it is a pattern of continued behavior that is generally required to develop a suspicion of abuse. An occasional outburst within families is considered normal, unless it results in serious physical or mental injury. Sexual “outbursts,” however, are never considered non-abusive. When in doubt, ask the appropriate agency.

How do You Make a Report?

If you are a mandated reporter, you must both telephone your report within 24 hours and follow this call in writing within 72 hours, mailing it to the person to whom you reported by telephone. This is a simple, straightforward report that requires identifying information on the suspected victim and perpetrator, a brief summary of the situation and information that identifies you as the responsible reporting party.



Post-Traumatic Stress Disorder: Implications for Primary Care

147

What Happens after a Report?

Mandated reporters, in most states, have the right to receive information on the progress and outcome of the investigation. As most protective services workers are overwhelmed with reports, the worker will probably not seek out the individual who filed the report. However, the worker and supervisor can be contacted and are required to provide information to the mandated reporter only.

For More Information

The National Mental Health Association maintains a referral and information center and can help you locate local chapters. These local groups have information about community services and act as advocates for people unable to represent themselves. For more information about the association, write or call:

National Mental Health Association Information Center
1021 Prince Street
Alexandria, VA 22314-2971
Phone: 1-703-684-7722
Fax: 1-703-684-5968
Toll-free: 1-800-969-6642

The National Domestic Violence Hotline is available to guide callers to local resources:
1-800-799-SAFE or TTY: 1-800-787-3224

Center Against Sexual Abuse
2333 N Central Ave, #100
Phoenix, AZ 85004
1-602-254-6400

There are many other sources of information that you can tap. Your area mental health authority, which is generally a part of the local government, may be useful. Other branches of your city or county government also may be able to help. For example, Child Protective Services or the education office might have information about help for children, and the agency for the aging might know about services for senior citizens. For legal advice, contact your local bar association.

Portions of this page were adapted from "Abuse of Children and Adults with Disabilities: A Prevention and Intervention Guidebook for Parents and Other Advocates," Nora Baladeria.

APPENDIX F

Physical Health and Post-traumatic Stress Disorder: Review and Synthesis

Paula P. Schnurr and M. Kay Jankowski

This article reviews the empirical evidence on post-traumatic stress disorder (PTSD) and physical health and considers this evidence in light of the physical health outcomes associated with other psychiatric disorders. The existing data show that PTSD is associated with poor self-reported health and increased utilization of medical services. To a lesser extent, the data also

show an association between PTSD and increased morbidity. Possible psychological, behavioral, and biological mechanisms are discussed, and a model integrating these mechanisms is presented.

This is a US government work. There are no restrictions on its use.

Psychological stress is associated with poor physical health outcomes. These outcomes include not just self-reports and illness behavior, but also disorders across a wide range of bodily systems.¹⁻³ Although most of the research on the physical health consequences of stress has focused on significant, but nontraumatic, stressors such as marital and occupational disruption, a subset of studies have focused on traumatic stressors such as military combat, physical and sexual assault, and natural disasters. These studies have found that traumatic exposure is consistently associated with poor health outcomes (Table 1).⁴ Although most of the evidence is based on health perceptions or utilization, traumatic exposure also is associated with physician-diagnosed morbidity and even mortality. For example, in one recent study, reports of adverse childhood experiences among adult members of a large health maintenance organization were related to increased risk of serious medical conditions, including cancer, ischemic heart disease, and chronic lung disease.⁵

To understand the relationship between stress and physical health, one must address the question of how stressor exposure relates to physical outcomes. Models of the relationship between nontraumatic stress and health have posited (or assume) a distress reaction as a crucial and initial part of the pathway. Analogously, Friedman and Schnurr⁴ argued that post-traumatic stress disorder (PTSD) should be considered the primary mediator of the relationship between traumatic exposure and physical health outcomes. This article reviews the empirical evidence on PTSD and physical health and considers this evidence in light of the physical health outcomes associated with other psychiatric disorders. Psychological, behavioral, and biological mechanisms are discussed, and a model integrating these mechanisms is presented.

PTSD and Physical Health

Self Report

The vast majority of research that has examined PTSD and physical health outcomes has used self-reported physical health as an outcome, measured in one of three ways. The first is self-report of physical health

conditions, as distinguished from physical symptoms. Subjects typically are asked whether they have any of a given list of medical disorders; or, for example, Boscarino⁶ asked subjects whether they ever had been told by a physician that they had any of a given list of illnesses. The second type of self-report measure is perceived health status. This usually is assessed with an instrument such as the SF-36,⁷ a self-report measure of general health functioning, or with a single 5-point scale that ranges from poor to excellent. The third type of self-report is a measure of somatic symptoms in which subjects report current symptoms from a list provided. Measures of self-reported health can be valid indicators of actual morbidity,^{6,7} but should be interpreted cautiously because they may be influenced by psychological processes as well.

Physical health conditions. There are consistent findings across studies to show an association between PTSD and self-reported physical health conditions. These studies primarily have been with veteran populations, but two studies have reported similar findings in civilian populations.^{8,9} In the two largest studies, Vietnam combat veterans with PTSD were compared to those without PTSD on number of chronic health problems¹⁰ and on specific chronic disease categories.⁶ In the original analyses from the National Vietnam Veterans Readjustment Study (NVVRS), Kulka et al¹⁰ found that both men and women with PTSD reported a greater number of chronic health problems than those without PTSD. In a reanalysis of the NVVRS data, Zatzick et al^{11,12} found that the association between number of chronic health problems and PTSD remained after controlling for comorbid psychiatric and other medical conditions for male, but not for female, Vietnam veterans. In the

From the VA National Center for PTSD, White River Junction, VT; and the Department of Psychiatry, Dartmouth Medical School, Hanover, NH.

Address reprint requests to Paula P. Schnurr, PhD, National Center for PTSD (116D), VAM & ROC, White River Junction, VT 05009.

This is a US government work. There are no restrictions on its use.

1084-3612/99/0404-0008\$0.00/0

Table 1. Summary of Results Concerning the Relationship Between Traumatic Exposure and Adverse Health Outcomes

Trauma	Outcome			
	Self-Report	Utilization	Morbidity	Mortality
Military	++	+	+/-	+
Sexual	++	++	+/-	NA
Disaster	+	+	+	+/-
Other ^a	++	NA	+	+

^aIncludes war refugees, hostages, and motor vehicle accident survivors.

++, clear association; +, probable association; +/-, inconsistent information; NA, information not available.

Reprinted with permission.⁴

most sophisticated analysis of the NVVRS data, Taft et al¹³ conducted separate path analyses for men and women to model how war zone exposure, PTSD, and the personal resources of hardiness and perceived social support relate to physical health problems. For both men and women, PTSD mediated the relationship between war zone exposure and physical health. These findings are consistent with Wolfe et al¹⁴ and Friedman and Schnurr,⁴ who found that PTSD was a more robust predictor of physical health outcome than war zone exposure, and that PTSD at least partially mediated the effects of war zone exposure on physical health conditions, in a sample of female Vietnam veterans. Taft et al¹³ also found that the effects of hardiness and perceived social support on reported physical conditions were mediated through PTSD.

Boscarino,⁶ using a sample of male Vietnam veterans from the Centers for Disease Control and Prevention's Vietnam Experiences Study, found an association between PTSD and chronic disease, including circulatory, digestive, musculoskeletal, nervous, respiratory, and non-sexually transmitted infectious disease. This study is particularly important because it controlled not only for demographics and selection bias, but also for factors such as behavioral risk factors, including smoking and substance abuse. Moreover, it controlled for hypochondriasis, thereby decreasing any reporting bias due to psychosomatic factors. The question of whether PTSD is uniquely associated with chronic physical diseases was partially addressed by also examining the effects of depression and other anxiety disorders on chronic physical conditions. Although PTSD was found to be most strongly related to chronic physical disease, comorbidity between PTSD, anxiety, and depression was not accounted for.

Beckham et al,¹⁵ in a sample of Vietnam veterans, found that PTSD was associated with a greater number of both lifetime and current physical conditions, and that PTSD severity was positively related to self-report of physical conditions. Depression was not predictive

of physical conditions. PTSD also is related to reports of physical conditions in Vietnam veterans from New Zealand¹⁶ and from Canada,¹⁷ and in Dutch World War II (WWII) resistance veterans.¹⁸ Only one study has failed to find an increased report of physical health conditions among male veterans with PTSD.¹⁹

Two studies have examined the relationship between PTSD and physical health conditions among non-veterans. Breslau and Davis⁸ found that young adults with PTSD lasting at least one year reported more physical health conditions than young adults with PTSD that lasted less than one year. In a study of Israeli immigrants who originated around the site of the 1986 Chernobyl nuclear accident, Cwikel et al⁹ found that the number of chronic physical conditions was related to PTSD, but no individual physical condition was strongly associated with PTSD.

Perceived health status. A handful of studies have assessed PTSD in relation to self-reported physical health status or health functioning. The aforementioned NVVRS data also were analyzed according to health functioning, and PTSD was associated with poorer perceived health status¹⁰ for both men and women. Additional analyses, controlling for comorbid psychiatric and other medical disorders, found that among male veterans, PTSD was associated with diminished well-being, increased report of fair or poor physical health, and physical limitations¹²; among female veterans, PTSD was associated with increased report of fair or poor physical health and one or more bed days for a physical health problem within the prior 3 months.¹¹ Similarly, Taft et al¹³ found substantial effects of PTSD on functional health status for both men and women, but particularly for men. This same relationship has been found for Vietnam veterans from New Zealand.¹⁶ Schnurr and Spiro²⁰ also found a strong association between PTSD symptoms and perceived health status, adjusting for mental health status, using data from WWII and Korean conflict veterans in the Normative Aging Study. The behavioral risk factors of smoking and alcohol use were assessed as potential mediators and, although PTSD symptoms were positively related to both smoking and alcohol use, neither mediated the effects of PTSD on health status.

PTSD and perceived health status has been studied in selective psychiatric populations. One study found an association between PTSD and poor self-reported medical status among cocaine-dependent patients.²¹ Among a sample of treatment-seeking adults with other anxiety disorders, those with comorbid PTSD, or who had experienced a traumatic event but who did not have PTSD, reported poorer perceived health status, as compared to adults with anxiety but without PTSD or trauma.²²

Recently, Jacobsen et al²³ examined PTSD symptoms in a sample of women with breast cancer who had previously undergone autologous bone marrow trans-

plantation. They found that PTSD symptoms were associated with poorer self-reported health-related functioning and with stage of illness, such that PTSD was more severe among women who had more extensive disease.

Physical symptoms. The majority of studies that have examined PTSD and physical health outcomes have used self-reported physical symptoms as an outcome. Taken together, this literature overwhelmingly indicates an association between PTSD and greater somatic complaints. Populations studied primarily have been male veterans, but there also have been studies of male firefighters,^{24,25} and of community-residing young adults²⁶ and adolescents.²⁷ Beckham et al¹⁵ found results similar to that which they observed for self-reported chronic health problems: PTSD was associated with a greater number of physical symptoms as well. In contrast, whereas Litz et al¹⁹ found no relationship between PTSD and self-reported physician-diagnosed disorders, PTSD was related to an overall increased number of physical symptoms. Ohry et al²⁸ found a significant association between PTSD symptoms and somatic complaints in Israeli former prisoners of war. Also in an Israeli veteran population, Solomon²⁹ and Shalev et al³⁰ found greater physical symptoms among those with PTSD. Specific symptoms related to PTSD were cardiovascular, gastrointestinal, neurological, low back pain, and headaches.³⁰ Schnurr et al,³¹ using longitudinal data from the Normative Aging Study, found that PTSD symptoms were positively related to number of physical symptoms, such that those men with the greatest number of physical health symptoms between ages 30 and 75 also reported the greatest amount of PTSD symptoms.

Other studies of American veteran and military populations, including older veterans seeking outpatient medical treatment,³² Persian Gulf War veterans,³³ and army personnel deployed to the Persian Gulf,³⁴ have consistently found PTSD to be related to physical symptoms. In a sample of Dutch WWII survivors, composed of both veterans and civilians, PTSD was found to be related to somatic complaints, even after statistical control for anxiety, depression, anger, and optimism, factors that presumably could inflate the reporting of somatic symptoms.³⁵

Among the studies that used nonmilitary and nonveteran populations, two studies have investigated PTSD and physical health complaints among professional firefighters. In both studies, those with PTSD endorsed a greater number of total symptoms overall, and specifically more cardiovascular symptoms.^{24,25} McFarlane et al²⁴ also found more musculoskeletal and neurological symptoms among those with PTSD. Moreover, firefighters with PTSD who endorsed physical symptoms were compared with firefighters with PTSD who did not endorse physical symptoms. Those with physical symptoms were more likely to be comorbid for depression and to have greater overall PTSD severity, and in particu-

lar, greater intrusive symptoms.²⁴ In a community sample of young adults, PTSD was associated with greater symptoms overall and with cardiopulmonary, gastrointestinal, conversion, and sexual symptoms in particular.²⁶ Moreover, PTSD, as compared to all other psychiatric disorders combined, was associated with a greater number of somatic symptoms across the above-mentioned categories. In the only study of adolescents identified,²⁷ PTSD was related to a greater number of self-reported physical health symptoms. Among adolescents, depression also was related to endorsement of physical symptoms, and no differences were found between PTSD and depression in their association with physical health symptoms.

Medical Utilization

As compared to the association of PTSD and self-reported physical health outcomes, the association of PTSD and medical service utilization has been surprisingly understudied. The NVVRS, as reported by Kulka et al,¹⁰ found that both male and female Vietnam veterans with PTSD were more likely than veterans without PTSD to have used services for physical health problems. Similarly, MacDonald et al,¹⁶ in a sample of Vietnam veterans from New Zealand, found that veterans with PTSD reported greater utilization of health care services. Finally, Australian firefighters with PTSD were more likely to seek medical help and to consult a doctor for medical problems than were firefighters without PTSD.²⁴

Morbidity and Mortality

Despite the importance of examining PTSD and morbidity, as opposed to relying solely on self-report of physical health problems, considerably less research has been conducted using morbidity as an outcome measure. Recently, two studies have investigated PTSD in relation to physician diagnosed medical disorders. Beckham et al¹⁵ compared male Vietnam combat veterans with and without PTSD while controlling for smoking and alcohol abuse and found that men with PTSD had more physician-diagnosed medical disorders. Schnurr et al³⁶ examined the association between PTSD symptoms and 12 chronic disease categories, using a community sample of male combat veterans of WWII and the Korean conflict. Even with control for age, smoking, alcohol consumption, and body mass index (BMI), survival analysis found that PTSD symptoms were associated with increased onset of medical disorder in four categories: arterial, lower gastrointestinal, dermatological, and musculoskeletal. The findings from this study may underestimate the association between PTSD and morbidity because the sample was composed of relatively healthy older men and only a few men had clinically elevated PTSD scores, suggesting the possibility of a greater association between PTSD and the onset of

chronic medical disorders among a less healthy population.

Several studies have examined cardiovascular morbidity in relation to PTSD. Falger et al³⁷ compared male Dutch resistance WWII veterans with and without PTSD and found that men with PTSD had a higher likelihood of angina than those without PTSD. (It is unclear, however, whether this cardiovascular risk variable was a physician-rated diagnosis or based on a self-report of a physician diagnosis.) Shalev et al³⁰ examined the association between PTSD and cardiovascular risk factors based on medical exam and laboratory test findings in a sample of male Israeli combat veterans. Even when controlling for smoking, they found that veterans with PTSD did not perform as well as their non-PTSD counterparts on a laboratory stress test that measured effort tolerance. No differences were reported, however, with regard to heart rate or blood pressure. Boscarino and Chang,³⁸ in a sample of male Vietnam veterans, also examined PTSD in relation to cardiovascular disease by comparing veterans with and without PTSD on electrocardiogram (ECG) findings. While controlling for risk factors such as alcohol consumption, BMI, current substance abuse, and smoking, in addition to current cardiovascular and central nervous system medication use, the investigators found that PTSD was associated with having a nonspecific ECG abnormality, atrioventricular conduction defects, and infarctions. For comparison purposes, anxiety and depression were also assessed in relation to ECG findings. Although anxiety and depression also were associated with nonspecific ECG abnormality, and depression additionally with arrhythmias, these findings must be interpreted with caution due to the high comorbidity between PTSD, anxiety, and depression that was not controlled for in the study.

One study examined PTSD in relation to risk of stroke among WWII prisoners of war and found a slightly increased risk that was not statistically significant.³⁹ Another study assessed PTSD within a clinical population of men and women with irritable bowel syndrome (IBS). Irwin et al⁴⁰ found that 36% met criteria for lifetime PTSD; on average, PTSD symptoms preceded onset of IBS symptoms by 9 years.

Only one study has examined mortality and PTSD.⁴¹ In a sample of male Vietnam veterans from the Agent Orange Registry, those with PTSD, relative to those without PTSD, had elevated all-cause mortality; regarding specific causes, only mortality due to external factors such as suicide and accidents was elevated. Standardized mortality ratios for veterans with PTSD, which provide a comparison to men of similar age and ethnicity, also were elevated for all causes and seemed to be accounted for primarily by external causes; however, the ratio also was elevated for diseases of the digestive system, most of which were cases of cirrhosis of the liver. In comparison, standardized mortality ratios for veterans without PTSD showed decreased risk of mortality due to circulatory disease.

Summary

There is a consistent association between PTSD and physical health, regardless of whether physical health is measured as morbidity or self-report. Although research examining PTSD and specific disorders primarily has been based on self-report, there is some converging evidence from these studies to suggest that PTSD is related to cardiovascular, gastrointestinal, and musculoskeletal disorders. It is noted also that the one morbidity study that has examined PTSD in relation to specific disorders found similar results.³⁶ PTSD appears to be related to increased utilization of medical services. The association of PTSD with poor health holds across both veteran and civilian populations, and remains after control for behavioral risk variables such as smoking and alcohol use. There also is some evidence that the relationship between PTSD and physical health remains after controlling for comorbid psychiatric disorders.

Motor vehicle accident and other trauma survivors may be injured as a result of their traumatic experience. Prisoners of war and political prisoners may not only experience injury through beatings and torture, but also may experience starvation and disease-promoting conditions. Increases in health problems might be expected in such cases, at least for a period of time following traumatic exposure. However, the observed relationships between PTSD and poor health outcomes are unlikely to result from traumatic injury or illness alone. Most trauma survivors are not injured or exposed to disease; for example, a study of combat veterans with PTSD found that 60% had a serious medical problem, but only 6% had a problem related to injury in combat.⁴²

Caution is warranted in making a causal interpretation of the findings relating PTSD to poor health. Most of the existing literature is based on cross-sectional designs, and even longitudinal designs are subject to threats to internal validity from unmeasured "third variables," thus raising the question: Is it PTSD that causes poor health, or some correlate of PTSD, such as smoking or depression, that is the actual cause? It is our view that many of these correlates are actually potential mechanisms, rather than confounds, and below we present a model that elaborates this view.

Mechanisms

Our multidimensional perspective on the possible mechanisms through which PTSD could lead to poor health is presented in Fig 1. As indicated in the figure, the biological and psychological correlates of PTSD could independently and jointly combine, directly, and indirectly, through behavioral pathways, to promote disease.

Psychological Factors

Most of the findings on PTSD and physical health are based on self-reports of health, which may be substantially influenced by psychological factors such as somati-

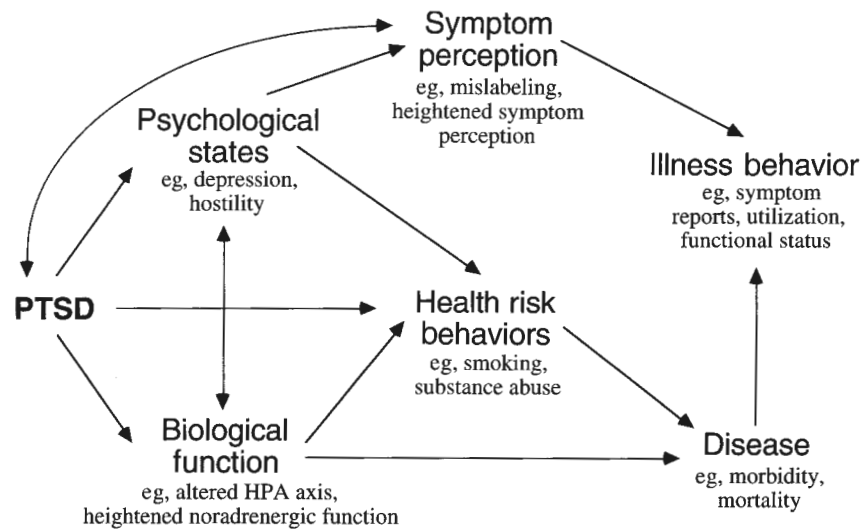


Figure 1. A model of possible mechanisms underlying the relationship between PTSD and physical health.

zation and neuroticism.⁴⁵ A related issue is that physical symptom inventories may include symptoms of depression and anxiety, such as low energy, rapid heartbeat, and shortness of breath. Thus, increased attention to physical symptoms, as well as mislabeling of depressive and anxious symptoms, is likely to explain at least part of the association between poor health and PTSD. There are several lines of evidence, however, that strongly indicate that this association is not solely due to attentional and mislabeling processes. Psychiatric disorders other than PTSD are associated with increased physical morbidity, which demonstrates that psychiatric disorder can be associated with poor health.^{44,45} Also, neuroticism is linked to self-reports of physical symptoms and general health, but less so to utilization, and not at all with morbidity and mortality.⁴⁵ In addition, self-reported health status is predictive of both morbidity and mortality.^{7,46} Finally, although self-reports may be only moderately accurate, PTSD patients and controls do not differ with respect to accuracy.¹⁵

PTSD may be related to poor health outcomes through comorbid depression. Depressed individuals report more physical symptoms and use more medical treatment than do nondepressed individuals.⁴⁷ As discussed above for PTSD, it is possible that these relationships reflect somatization or overlap between physical symptom measures and some symptoms of depression. However, depression has been linked to morbidity from cardiovascular disease in previously healthy populations and to additional morbidity and mortality among patients with serious medical illness.⁴⁸⁻⁵⁰ Furthermore, depression is related to decreased immune function.⁵¹

PTSD also may be related to poor health outcomes through more general symptoms of comorbid anxiety or panic. Overall, the evidence linking anxiety to cardiovascular morbidity and mortality is quite strong,⁴⁴ although most studies have not controlled for cardiovascular risk factors and the mechanisms are largely

unknown. Panic disorder is especially interesting because many of the symptoms of a panic attack are cardiovascular in nature. A recent review⁵² concluded that although panic disorder is linked to poor health outcomes and increased utilization, that these relationships are unlikely to be due to biological consequences of panic, and instead are most likely due to increased sensitivity to symptoms and to behavioral factors.

Hostility, or anger, is a common correlate of PTSD. Decades of research on the health risks associated with the Type A behavior pattern have isolated hostility as a crucial factor in cardiovascular disease.⁵³ The mechanism is presumed to be the propensity of hostile individuals to show increased sympathetically mediated cardiovascular responses to provocation, as well as decreased parasympathetic responses to this activation, although behavioral factors such as smoking also are involved.³ Thus, hostility could mediate a relationship between PTSD and cardiovascular illness.

Little is known about how coping and social support relate to health in PTSD. One longitudinal study found that initial levels of PTSD and low social support, but not poor coping, predicted subsequent physical symptoms.⁵⁴ No evidence of mediating or moderating roles for coping and social support were found, although ultimately such roles may be important in understanding the relationship between PTSD and physical health (eg, use of alcohol as an avoidant coping strategy for reducing hyperarousal).

Biological Factors

As indicated elsewhere in this issue of *Seminars in Clinical Neuropsychiatry* (see articles by Southwick and Yehuda), PTSD involves alterations in two of the major systems that mediate the body's response to stress, the adrenergic and hypothalamic-pituitary-adrenal (HPA) systems. In addition to the direct relationship between adrenergic and HPA function and normal

physiological activity, both systems influence other key neurobiologic mechanisms that are involved in the relationship between stress and physical health.^{1,55}

To evaluate the possible health consequences of these changes in PTSD, it is important to consider the increasing evidence of interactions among the immune, nervous, and endocrine systems.^{2,56} For example, the immune system is mediated by the autonomic nervous system and the HPA axis, as well as regulatory peptides and pituitary hormones; the immune system, in turn, releases chemical messengers that affect the nervous system, with the “trafficking” of immune cells being an important part of this process.² Also, these interactions may be far-ranging; for example, glucocorticoids affect the reproductive axis by influencing luteinizing hormone-releasing hormone, luteinizing hormone and follicle stimulating hormone; testosterone and estradiol; and affect the growth and thyroid axes by influencing growth hormone, thyroid-stimulating hormone, and triiodothyronine (T₃).¹

Altered HPA axis function. The central role of glucocorticoids in interactions with the immune system suggests that the altered HPA axis function in PTSD could be a key mechanism leading to poor health. What to expect is unclear, however. Because cortisol has immunosuppressive effects, the low levels of cortisol in PTSD would imply that PTSD might lead to disorders involving increased immune system activity. Chrousos⁵⁷ included PTSD in a list of disorders potentially associated with activation of immune-mediated inflammation through decreased HPA-axis activity (eg, rheumatoid arthritis). However, the enhanced receptor sensitivity and periodically high levels of cortisol in PTSD imply that PTSD might, like depression, lead to disorders involving decreased immune function and suppression of immune-mediated inflammation.

Studies of the immune system in PTSD are inconclusive, although they suggest that the former scenario may be somewhat more likely. Two of three studies have found that PTSD is associated with elevated numbers of leukocytes.^{58,59} Lymphocyte numbers appear unrelated to PTSD,^{59,60} except in one study with a very large sample size, which found PTSD associated with increased numbers of total lymphocytes, total T cells, and CD4 cells.⁵⁸ PTSD is unrelated to the number of natural killer (NK) cells.^{59,60} In one study, NK cell activity was found to be increased in PTSD,⁶⁰ whereas in another, it was decreased.⁵⁹ A further study failed to find any relationship between PTSD and NK cell activity,⁶¹ however, this study also administered an in vitro challenge with methionine-enkephalin and found that PTSD patients showed decreases in NK activity, which was not observed in normal or substance-abusing controls.

Additional evidence of immune system activation in PTSD comes from findings on responses to a standard antigen battery. One study failed to find any differences in responsiveness between PTSD and no PTSD groups,⁵⁸

but another found that combat veterans with PTSD had increased responsiveness relative to both military and non-veteran control groups.⁶² Further evidence of an immune profile that is consistent with a pattern of increased activation is the elevation of interleukin-1-beta (IL-1 β) levels in PTSD, an inflammatory cytokine which can increase cortisol by stimulating the HPA axis.⁶³ Note that levels of IL-1 β (and other cytokines) are elevated in depression, despite the elevated levels of cortisol that typically are observed—a coexistence that has been described as a paradox with implications for the etiology of depression.⁵¹ Note also that investigations have failed to find a relationship between levels of cortisol and immune measures in PTSD,^{60,63} which suggests a dysregulation of how these systems interact. It will be important for future research to examine possible influences from the noradrenergic and endogenous opioid systems in order to clarify the nature of immune functioning in PTSD as well as overlaps with depression and other disorders.

Other biological correlates. One of the hallmark symptoms of PTSD is physiological reactivity to traumatic reminders, a response demonstrated many times in the laboratory (see article by Pitman et al in this issue). Over 10 years ago, Rosen and Fields⁶⁴ proposed that autonomic hyperreactivity in PTSD could lead to increased medical morbidity. Because sympathetically mediated reactivity is associated with the development of cardiovascular disorder,⁶⁵ individuals with PTSD might be especially likely to develop cardiovascular disorder. As indicated above, emerging evidence is consistent with this possibility.

The mechanisms that might operate in mediating the effects of PTSD on cardiovascular disorder are likely to be those that have been suggested for depression, hostility, and stress, and include sympathoadrenal hyperactivity, diminished heart rate variability, and platelet aggregation.^{3,48,49} These mediators involve complex interactions among systems. For example, individuals who exhibit the largest sympathetically mediated increases in cardiovascular reactivity to brief experimental stressors also show the largest catecholaminergic increases and immune changes.⁶⁶

Blood pressure reactivity to laboratory stressors has been hypothesized to be related to the development of hypertension, although data are inconsistent and suggest that laboratory reactivity predicts hypertension only among individuals with a family history of the disorder.⁶⁷ A number of studies have investigated laboratory reactivity to traumatic and nontraumatic stressors among individuals with PTSD. The largest, by Keane et al,⁶⁸ studied over 1,400 male Vietnam veterans and found that those with current PTSD had a greater reactivity than those who never had PTSD to traumatic stressors. Although the PTSD group has less blood pressure reactivity than the never-PTSD group and a past-PTSD group to a nontraumatic stressor, it is possible

that chronic PTSD may confer additional risk of hypertension among those already at risk due to family history. This subgroup may be relatively small because Keane et al found no differences in mean resting levels of systolic and diastolic blood pressure among current-, past-, and never-PTSD groups. However, more specific investigations that control for known risk factors for hypertension are needed before any firm conclusions can be drawn.

Another biological correlate of PTSD—sleep dysregulation—recently has been linked to decreased NK cell activity. In one study of disaster survivors,⁵⁹ self-reported sleep problems partially mediated the relationship between PTSD symptoms and NK cell activity. In a study of PTSD symptoms among bereaved individuals, which was conducted in a sleep laboratory, time awake during non-rapid eye movement (NREM) sleep substantially mediated the relationship between PTSD symptoms and NK activity.⁶⁹

Behavioral Factors

Our review of the literature found that PTSD is correlated with poor physical health even when behavioral factors such as smoking are controlled, and one study found only small evidence of mediation.²⁰ Nevertheless, the relationship between PTSD and poor health is likely to be mediated in part by behavioral factors that are known risk factors for disease, such as smoking, substance abuse, diet, and lack of exercise. The increased likelihood of substance abuse in PTSD has been well documented.^{10,70} Less research has been done establishing a connection between PTSD and smoking, but it is clear that PTSD is related to smoking as well.⁵⁸ PTSD is related to amount smoked,⁷¹ and a longitudinal study found that increases in PTSD were associated with increases in alcohol consumption and smoking.⁷² These behavioral factors may interact with one another and with psychological and biological correlates of PTSD; for example, smoking is related to excessive drinking, and both are related to depression.⁷³

Allostatic Load: An Integrative Mechanism

A helpful approach to understanding how PTSD could lead to poor health is provided by McEwan and Stellar's^{2,74} psychobiological model of how a potential stressor can lead to physical disease. Central to their model is the concept of allostatic load, which is defined as: "The strain on the body produced by repeated up and downs of physiologic response, as well as the elevated activity of physiologic systems under challenge, and the changes in metabolism and wear and tear on a number of organs and tissues." In the model, psychological factors and genetic and acquired predispositions combine to determine appraisal and behavioral processes. The behavioral response is seen as affecting the biological response, which also is affected by genetic and developmental factors. The biological response, in turn, is seen

as initiated by the brain, the autonomic nervous system, and neuroendocrine mediators, which influence effectors (immune system, cardiovascular system, adipose tissue, and muscle) that ultimately influence disease outcomes. The chronic or repeated stimulation of the effectors may lead to allostatic load, which over time causes "wear and tear," according to the authors—and thereby increases the risk for pathology and disease. Specific types of load mentioned are repeated stressor exposure, lack of adaptation, a prolonged stress response that fails to return to normal, and an inadequate response to stressor exposure.

McEwan and Stellar² offer an example of how interactions among systems can lead to disease: Elevated glucocorticoids can cause insulin hypersecretion and insulin resistance, which together promote obesity and facilitate atherosclerotic plaque formation. According to our model, an example might be that an individual with PTSD uses smoking and excessive alcohol consumption to manage intrusive symptoms, which themselves lead to the biological consequences of excessive, repeated sympathetic activation; both the smoking and alcohol would have biological consequences, and the alcohol consumption in particular also might have negative psychosocial consequences that could be a further source of stress.

Key aspects of McEwan and Stellar's^{2,74} model are its multivariate, longitudinal perspective and an emphasis on the cumulative and interactive effects of factors that alone, or in a short time frame, may have only minimal or transient effects that would be insufficient for promoting disease. We believe that these elements make allostatic load a likely mechanism through which the various correlates of PTSD could combine, over time, to increase the likelihood of disease, and perhaps to a greater extent than in other psychiatric disorders. PTSD and other disorders share a great deal in common, both biologically and psychologically, as well as behaviorally, but it may be the sheer number and chronicity of disease-enhancing elements in PTSD that produce more "wear and tear" than is typical in other disorders.

Conclusions and Future Directions

The existing data show that PTSD is associated with poor self-reported health and increased utilization of medical services. To a lesser extent, the data also show an association between PTSD and increased morbidity. However, it is premature to draw definitive causal conclusions about the effect of PTSD on physical health.

The suggestive nature of the data, along with the increasing information about the effects of psychological stress on biological systems, indicates that research on the health consequences associated with PTSD would be both promising and important. As an agenda for this research, we suggest that the highest priority is to determine the nature of the association between PTSD and poor health; before trying to understand how

PTSD might cause poor health, we need to know more precisely the kinds of medical conditions that are associated with PTSD. The focus needs to be on morbidity, and not on assessments based solely on self-reported health or documentation of utilization. Also, investigations into mechanisms can and should proceed simultaneously with investigations into the correlates of PTSD; for example, studies of HPA axis function or smoking in PTSD should include assessments of cardiovascular function whenever possible.

An important next step in the suggested program of research is to determine the uniqueness of the association between PTSD and physical health, relative to that observed for other psychiatric disorders, particularly, depression, panic, and substance abuse. As indicated above, disorders other than PTSD also are associated with serious medical illness,^{44,45} and there is only limited evidence indicating that PTSD may be especially likely to lead to poor health.^{25,38} We consider the comorbidity of PTSD with other psychiatric disorders as part of the mechanism underlying the association of PTSD with poor health. We also have proposed allostatic load as a possible framework for understanding how PTSD might be different from other psychiatric disorders, but this hypothesis needs to be tested.

A related issue is that of life-threatening medical illness, such as cancer or cardiovascular disorder, as trauma.²³ Here, the PTSD-illness relationship is reversed, with the illness as cause. The question of whether PTSD might lead to poorer disease outcomes in such cases has not been addressed, although this is possible given findings showing that depression predicts increased morbidity and mortality.⁴⁸⁻⁵⁰

The existing data also suggest an agenda for clinical practice that involves increased collaboration with primary and specialty medical care professionals. Because PTSD, like other psychiatric disorders,⁴⁷ is associated with higher levels of medical service utilization, increased attention should be paid to the role of screening for PTSD in medical settings—as is now being done for depression and substance abuse. If PTSD, like depression, turns out to predict poor recovery from serious illness, integration of PTSD treatment services with medical care services is warranted. Finally, if PTSD does indeed cause poor health, attempts should be made to address and prevent these health consequences from occurring.

References

1. Chrousos GP, Gold PW: The concepts of stress and stress system disorders: Overview of physical and behavioral homeostasis. *JAMA* 267:1244–1252, 1992
2. McEwan BS, Stellar E: Stress and the individual: Mechanisms leading to disease. *Arch Intern Med* 153:2093–2101, 1993
3. Williams R: Somatic consequences of stress, in Friedman MJ, Charney DS, Deutch AY (eds): *Neurobiological and Clinical Consequences of Stress: From Normal Adaptation to PTSD*. Philadelphia, Raven, 1995, pp 403–412
4. Friedman MJ, Schnurr PP: The relationship between trauma, PTSD, and physical health, in Friedman MJ, Charney DS, Deutch AY (eds): *Neurobiological and Clinical Consequences of Stress: From Normal Adaptation to PTSD*. Philadelphia, Raven, 1995, pp 507–524
5. Felitti VJ, Anda RF, Nordenberg D, et al: Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *Am J Prev Med* 14:245–258, 1998
6. Boscarino JA: Diseases among men 20 years after exposure to severe stress: Implications for clinical research and medical care. *Psychosom Med* 59:605–614, 1997
7. McHorney CA, Ware JE, Rogers W, et al: The validity and relative precision of MOS short- and long-form health status scales and Dartmouth COOP charts. *Med Care* 30:MS253–MS265, 1992
8. Breslau N, Davis GC: Posttraumatic stress disorder in an urban population of young adults: Risk factors for chronicity. *Am J Psychiatry* 149:671–675, 1992
9. Cwikel J, Abdelgani A, Goldsmith JR, et al: Two-year follow-up study of stress-related disorders among immigrants to Israel from the Chernobyl area. *Environ Health Perspect* 105:1545–1550, 1997
10. Kulka RA, Schlenger WE, Fairbank JA, et al: *Trauma and the Vietnam War generation: Report of findings from the National Vietnam Veterans Readjustment Study*. New York, Brunner/Mazel, Inc., 1990
11. Zatzick DF, Golding JM, Weiss DS, et al: Post-traumatic stress disorder and functioning and quality of life outcomes in female Vietnam veterans. *Mil Med* 162:661–665, 1997
12. Zatzick DF, Marmar CR, Weiss DS, et al: Posttraumatic stress disorder and functioning and quality of life outcomes in a nationally representative sample of male Vietnam veterans. *Am J Psychiatry* 154:1690–1695, 1997
13. Taft CT, Stern AS, King LA, et al: Modeling physical health and functional health status: The role of combat exposure, posttraumatic stress disorder, and personal resource attributes. *J Trauma Stress* 12:3–23, 1999
14. Wolfe J, Schnurr PP, Brown PJ, et al: Posttraumatic stress disorder and war-zone exposure as correlates of perceived health in female Vietnam War veterans. *J Consult Clin Psychol* 62:1235–1240, 1994
15. Beckham JC, Moore SD, Feldman ME, et al: Health status, somatization, and severity of posttraumatic stress disorder in Vietnam combat veterans with posttraumatic stress disorder. *Am J Psychiatry* 155:1565–1569, 1998
16. MacDonald C, Chamberlain K, Long N: Posttraumatic stress disorder (PTSD) and its effects in Vietnam veterans: The New Zealand experience. *New Zealand J Psychol* 24:63–68, 1995
17. Stretch RH: Psychosocial readjustment of Canadian Vietnam veterans. *J Consult Clin Psychol* 59:188–189, 1991
18. Hovens JE, Op den Velde W, Falger PRJ, et al: Reported

- physical health in resistance veterans from World War II. *Psychol Rep* 82:987–996, 1998
19. Litz BT, Keane TM, Fisher L, et al: Physical health complaints in combat-related post-traumatic stress disorder: A preliminary report. *J Trauma Stress* 5:131–141, 1992
 20. Schnurr PP, Spiro A: Combat exposure, PTSD, and health behaviors as predictors of self-reported physical health in older military veterans. *J Nerv Ment Dis* 187:353–359, 1999
 21. Najavits LM, Gastfriend DR, Barber JP, et al: Cocaine dependence with and without PTSD among subjects in the National Institute on Drug Abuse Collaborative Cocaine Treatment Study. *Am J Psychiatry* 15:214–219, 1998
 22. Warshaw MG, Fierman E, Pratt L, et al: Quality of life and dissociation in anxiety disorder patients with histories of trauma or PTSD. *Am J Psychiatry* 150:1512–1516, 1993
 23. Jacobsen PB, Widows MR, Hann DM, et al: Posttraumatic stress disorder symptoms after bone marrow transplantation for breast cancer. *Psychosom Med* 60:366–371, 1998
 24. McFarlane AC, Atchison M, Rafalowicz E, et al: Physical symptoms in posttraumatic stress disorder. *J Psychosom Res* 38:715–726, 1994
 25. Wagner D, Heinrichs M, Ehler U: Prevalence of symptoms of posttraumatic stress disorder in German professional firefighters. *Am J Psychiatry* 155:1727–1732, 1998
 26. Andreski P, Chilcoat H, Breslau N: Post-traumatic stress disorder and somatization symptoms: A prospective study. *Psychiatry Res* 79:131–138, 1998
 27. Clark DB, Kirisci L: Posttraumatic stress disorder, depression, alcohol use disorders and quality of life in adolescents. *Anxiety* 2:226–233, 1996
 28. Ohry A, Solomon Z, Neria Y, et al: The aftermath of captivity: An 18-year follow-up of Israeli ex-POWs. *Behav Med* 20:27–33, 1994
 29. Solomon Z: Somatic complaints, stress reaction, and posttraumatic stress disorder: A three-year follow-up study. *Behav Med* 14:179–185, 1988
 30. Shalev A, Bleich A, Ursano RJ: Posttraumatic stress disorder: Somatic comorbidity and effort tolerance. *Psychosomatics* 31:197–203, 1990
 31. Schnurr PP, Spiro A, Aldwin CM, et al: Physical symptom trajectories following trauma exposure: Longitudinal findings from the normative aging study. *J Nerv Ment Dis* 186:522–528, 1998
 32. Hankin CS, Abueg FR, Gallagher-Thompson D, et al: Dimensions of PTSD among older veterans seeking outpatient medical care: A pilot study. *J Clin Geropsych* 2:239–246, 1996
 33. Baker DG, Mendenhall CL, Simbartl LA, et al: Relationship between posttraumatic stress disorder and self-reported physical symptoms in Persian Gulf War veterans. *Arch Intern Med* 157:2076–2078, 1997
 34. Wolfe J, Proctor SP, Davis JD, et al: Health symptoms reported by Persian Gulf War veterans two years after return. *Am J Ind Med* 33:104–113, 1998
 35. Bramsen I: The long-term psychological adjustment of World War II survivors in the Netherlands. Delft, The Netherlands, Eburon Press, 1995
 36. Schnurr PP, Spiro A, Paris AH: Physician-diagnosed medical disorders in relation to PTSD symptoms in older military veterans (in press)
 37. Falger PRJ, Op den Velde W, Hovens JE, et al: Current posttraumatic stress disorder and cardiovascular disease risk factors in Dutch resistance veterans from World War II. *Psychother Psychosom* 57:164–171, 1992
 38. Boscarino JA, Chang J: Electrocardiogram abnormalities among men with stress-related psychiatric disorders: Implications for coronary heart disease and clinical research. *Ann Rev Med* (in press)
 39. Brass LM, Page WF: Stroke in former prisoners of war. *J Stroke Cerebrovasc Dis* 6:72–78, 1996
 40. Irwin C, Falsetti SA, Lydiard RB, et al: Comorbidity of posttraumatic stress disorder and irritable bowel syndrome. *J Clin Psychiatry* 57:576–578, 1996
 41. Bullman TA, Kang HK: Posttraumatic stress disorder and the risk of traumatic deaths among Vietnam veterans. *J Nerv Ment Dis* 182:604–610, 1994
 42. White PA, Faustman WO: Coexisting physical conditions among inpatients with post-traumatic stress disorder. *Mil Med* 154:66–71, 1989
 43. Watson D, Pennebaker JW: Health complaints, stress, and distress: Exploring the central role of negative affectivity. *Psychol Rev* 96:234–254, 1989
 44. Hayward C: Psychiatric illness and cardiovascular disease risk. *Epidemiol Rev* 17:129–138, 1995
 45. Stoudemire A (ed): *Psychological Factors Affecting Medical Conditions*. Washington, DC, American Psychiatric Press, 1995
 46. Piljs LTK, Feskens EJM, Kromhout D: Self-rated health, mortality, and chronic diseases in elderly men: The Zutphen Study, 1985–1990. *Am J Epidemiol* 138:840–848, 1993
 47. Schulberg HC, McClelland M, Burns BJ: Depression and physical illness: The prevalence, causation, and diagnosis of comorbidity. *Clin Psychol Rev* 7:145–167, 1987
 48. Dwight MM, Stoudemire A: Effects of depressive disorders on coronary artery disease: A review. *Harvard Rev Psychiatry* 5:115–122, 1997
 49. Musselman DL, Evan DL, Nemeroff CB: The relationship of depression to cardiovascular disease. *Arch Gen Psychiatry* 55:580–592, 1998
 50. Silverstone PH: Depression increases mortality and morbidity in acute life-threatening illness. *J Psychosom Res* 34:651–657, 1990
 51. Connor TJ, Leonard BE: Depression, stress, and immunological activation: The role of cytokines in depressive disorders. *Life Sci* 62:583–606, 1998
 52. Jakubec DF, Taylor CB: Medical aspects of panic disorder and its relationship to other medical conditions, in Nutt DJ, Ballenger JC, Lepine JP (eds): *Panic Disorder: Clinical Diagnosis, Management, and Mechanisms*. London, Martin Dunitz, 1999, pp 109–124
 53. Goldstein MG, Niaura R: Cardiovascular death, part I: Coronary artery disease and sudden death, in Stoudemire A (ed): *Psychological Factors Affecting Medical Conditions*. Washington, DC, American Psychiatric Press, 1995, pp 19–37
 54. Solomon Z, Mikulincer M, Habershaim N, et al: Life-events, coping strategies, social resources, and somatic complaints among combat stress reaction casualties. *Br J Med Psychol*, 63:137–148, 1990

55. Michaelson D, Licinio J, Gold PW: Mediation of the stress response by the HPA axis, in Friedman MJ, Charney DS, Deutch AY (eds): *Neurobiological and Clinical Consequences of Stress: From Normal Adaptation to PTSD*. Philadelphia, Raven, 1995, pp 225–238
56. Ader R, Cohen N, Felten D: Psychoneuroimmunology: Interactions between the nervous system and the immune system. *Lancet* 345:99–103, 1995
57. Chrousos GP: The hypothalamic-pituitary-adrenal axis and immune-mediated inflammation. *N Engl J Med* 332:1351–1362, 1995
58. Boscarino JA, Chang J: Higher abnormal leukocyte and lymphocyte counts 20 years after exposure to severe stress: Research and clinical implications. *Psychosom Med* (in press)
59. Ironson G, Wynings C, Schneiderman N, et al: Posttraumatic stress symptoms, intrusive thoughts, loss, and immune function after Hurricane Andrew. *Psychosom Med* 59:128–141, 1997
60. Laudeslager ML, Aasal R, Adler L, et al: Elevated cytotoxicity in combat veterans with long-term posttraumatic stress disorder: Preliminary observations. *Brain Behav Immun* 12:74–79, 1998
61. Mosnaim AD, Wolf ME, Maturana P, et al: In vitro studies of natural killer cell activity in post traumatic stress disorder patients: Response to methionine-enkephalin challenge. *Immunopharmacology* 25:107–116, 1993
62. Burges Watson IP, Muller HK, Jones IH, et al: Cell-mediated immunity in combat veterans with posttraumatic stress disorder. *Med J Australia* 159:513–516, 1993
63. Spivak B, Shohat B, Mester R, et al: Elevated levels of serum interleukin-1 β in combat-related posttraumatic stress disorder. *Biol Psychiatry* 42:345–348, 1997
64. Rosen J, Fields R: The long-term effects of extraordinary trauma: A look beyond PTSD. *J Anx Disord* 2:179–181, 1988
65. Blascovich J, Katkin ES (eds): *Cardiovascular Reactivity to Psychological Stress and Disease*. Washington, DC, American Psychological Association, 1993
66. Sgoutas-Emch SA, Cacioppo JT, Uchino BN, et al: The effects of an acute psychological stressor on cardiovascular, endocrine, and cellular immune response: A prospective study of individuals high and low in heart rate reactivity. *Psychophys* 31:264–271, 1994
67. Niaura R, Goldstein MG: Cardiovascular death, part II: Coronary artery disease and sudden death and hypertension, in Stoudemire A (ed): *Psychological Factors Affecting Medical Conditions*. Washington, DC, American Psychiatric Press, 1995, pp 39–56
68. Keane TM, Kolb LC, Kaloupek DG, et al: Utility of psychophysiological measurement in the diagnosis of posttraumatic stress disorder: Results from a Department of Veterans Affairs Cooperative Study. *J Cons Clin Psychol* 66:914–923, 1998
69. Hall M, Baum A, Buysse DJ, et al: Sleep as a mediator of the stress-immune relationship. *Psychosom Med* 60:48–51, 1998
70. Kessler RC, Sonnega A, Bromet EJ, et al: Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry* 52:1048–1060, 1995
71. Beckham JC, Kirby AC, Feldman ME, et al: Prevalence and correlates of heavy smoking in Vietnam veterans with chronic posttraumatic stress disorder. *Addict Behav* 22:637–647, 1997
72. Solomon Z, Mikulincer M, Kotler M: A two year follow-up of somatic complaints among Israeli combat stress reaction casualties. *J Psychosom Res* 31:463–469, 1987
73. Hartka E, Johnstone BM, Leino EV, et al: A meta-analysis of depressive symptomatology and alcohol consumption over time. *Br J Addict* 86:1283–1298, 1991
74. McEwan BS: Protective and damaging effects of stress mediators. *N Engl J Med* 338:171–179, 1998



APPENDIX G

References

- Abbott, J., Johnson, R., Koziol-McLain, J., & Lowenstein, S.R. (1995). Domestic violence against women: Incidence and prevalence in an emergency department population. Journal of the American Medical Association,273, 1763-1767.
- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, D.C.: American Psychiatric Association.
- Archibald, H.C., Long, D.M., Miller, C., & Tuddenham, R.D. (1962). Gross stress reaction in combat: 15-year follow-up. American Journal of Psychiatry,119, 317-322.
- Baker, D.G., Boat, B.W., Grinvalsky, H.T., & Geraciotti, T.D., Jr. (1998). Interpersonal trauma and animal-related experiences in female and male military veterans: Implications for program development. Military Medicine,163, 20-25.
- Bauserman, R.B., & Rind, B. (1997). Psychological correlates of male child and adolescent sexual experiences with adults: A review of the nonclinical literature. Archives of Sexual Behavior,26, 105-139.
- Beckham, J.C., Roodman, A.A., Shipley, R.H., Hertzberg, M.A., Cunha, G.H., Kudler, H.S., Levin, E.D., Rose, J.E., & Fairbank, J.A. (1995). Smoking in Vietnam combat veterans with post-traumatic stress disorder. Journal of Traumatic Stress,8, 461-472.
- Bradley, A. (1998). Detection of Sexual Trauma in Women, Markers and Screening techniques, Federal Practitioner Supplement, 15:3-7.
- Breslau, N., Kessler, R.C., Chilcoat, H.D., Schultz, L.R., Davis, G.C., & Andreski, P. (1998). Trauma and post-traumatic stress disorder in the community: The 1996 Detroit Area Survey of Trauma. Archives of General Psychiatry,55, 626-631.
- Breslau, N., Peterson, E.L., Kessler, R.C., & Schultz, L.R. (1999). Short screening scale for DSM-IV Post-traumatic Stress Disorder. American Journal Of Psychiatry,156, 908-911.
- Briere, J. & Zaidi, LY. (1989). Sexual abuse histories and sequelae in female psychiatric emergency room patients. American Journal of Psychiatry,146, 1602-1606.



Post-Traumatic Stress Disorder: Implications for Primary Care

159

Butterfield, M.I., Forneris, C.A., Feldman, M.E., & Beckham, J.C. (2000). Hostility and functional health status in women veterans with and without posttraumatic stress disorder: A preliminary study. Journal of Traumatic Stress,13, 4, 735-741.

Butterfield, M.I., McIntyre, L.M., Stechuchak, K.M., Nanda, K., & Bastian, L.A. (1998). Mental disorder symptoms in veteran women: impact of physical and sexual assault. Journal of the American Medical Women's Association,53, 4, 198-200.

Butterfield, M.I., Bastian, L., McIntyre, L.M., Koons, C., Vollmer, M.G., Burns, B.J. (1996). Screening for mental disorders and history of sexual trauma and battering among women using primary health care services. Journal of Clinical Outcomes,3,5, 55-61.

Caralis, P.V. & Musialowski, R. (1997). Women's experiences with domestic violence and their attitudes and expectations regarding medical care of abuse victims. Southern Medical Journal,90, 1075-80.

Carballo-Diequez, A., & Dolezal, C. (1995). Association between history of childhood sexual abuse and adult HIV-risk sexual behavior in Puerto Rican men who have sex with men. Child Abuse and Neglect,19, 595-605.

Collings, S.J. (1995). The long-term effects of contact and noncontact forms of child sexual abuse in a sample of university men. Child Abuse and Neglect,19, 1-6.

Coyle, B.S., Wolan, D.L., & Van Horn, A.S. (1996). The prevalence of physical and sexual abuse in women veterans seeking care at a Veterans Affairs Medical Center. Military Medicine,161, 588-593.

Defense Manpower Data Center (1996). Sexual harassment in the military: 1995 report. Arlington, VA.

Drossman, D.A., Leserman, J., Nachman, G., Li, Z.M., Gluck, H., Toomey, T.C., & Mitchell, C.M. (1990). Sexual and physical abuse in women with functional or organic gastrointestinal disorders. Annals of Internal Medicine,113, 828-833.

Elder, G. J. & Clipp, E. (1989). Combat experience and emotional health: Impairment and resilience in later life. Journal of Personality,57, 311-341.

Eldridge, G. (1991). Contextual issues in the assessment of post-traumatic stress disorder. Journal of Traumatic Stress,4, 7-23.



Post-Traumatic Stress Disorder: Implications for Primary Care

160

Engdahl, B., Eberly, R., Hurwitz, T., Mahowald, M., & Blake, J. (2000). Sleep in a community sample of elderly war veterans with and without post-traumatic stress disorder. Biological Psychiatry,47, 520-525.

Fifer, S.K., Mathias, S.D., Patrick, D.L., Mazonson, P.D., Lubeck, D.P., & Buesching, D.P. (1999). Untreated anxiety among adult primary care patients in a health maintenance organization. Archives of General Psychiatry,51, 740-750.

Finklehor, D., Hotaling, G., Lewis, I.A., & Smith, C. (1990). Sexual abuse in a national survey of adult men and women: Prevalence, characteristics, and risk factors. Child Abuse and Neglect,14, 19-28.

Foa, E.B, Keane, T.M., Friedman, M.J. (Eds.). (2000). Effective treatments for PTSD: practice guidelines from the International Society of Traumatic Stress Studies. New York: Guilford Press.

Follingstad, D.R. (1980). A reconceptualization of issues in the treatment of abused women: a case study. Psychotherapy: Theory, Research, and Practice,17, 294-303.

Fontana, A. & Rosenheck, R. (1998). Duty-related and sexual stress in the etiology of PTSD among women veterans who seek treatment. Psychiatric Services,49, 658-662.

Fontana, A., & Rosenheck, R. (1998). Effects of compensation-seeking on treatment outcomes among veterans with post-traumatic stress disorder. Journal of Nervous and Mental Disease,186, 223-230.

Friedman, M. J. (2001). A guide to the literature on pharmacotherapy for PTSD. PTSD Research Quarterly, 11, 1, 1-7.

Friedman, M. J. (2001). Post-traumatic stress disorder: The latest assessment and treatment strategies. Kansas City: Compact Clinicals.

Friedman, L.S., Samet, J.H., Roberts, M.S., Hudlin, M., & Hans, P. (1992). Inquiry about victimization experiences, a survey of patient preferences and physician practices. Archives of Internal Medicine,1152, 1186-1190

Gabbard, G.O. & Nadelson, C. (1995). Professional boundaries in the physician-patient relationship. Journal of the American Medical Association,273, 1445-1449.



Post-Traumatic Stress Disorder: Implications for Primary Care

161

Gordon, M. (1990). Males and females as victims of childhood sexual abuse: An examination of the gender effect. Journal of Family Violence,*5*, 321-332.

Halligan, S.L., & Yehuda, R. (2000). Risk factors for PTSD. PTSD Research Quarterly,*11*, 1-7.

Hankin, C.S., Spiro, A., Miller, D.R., & Kazis, L. (1999). Mental disorders and mental health treatment among U.S. Department of Veterans Affairs outpatients: The Veterans Health Study. American Journal of Psychiatry,*156*, 1924-1930.

Keane, T., Kolb, L., Kaloupek, D., Orr, S., Blanchard, E., Thomas, R., Hsieh, F., & Lavori, P. (1998). Utility of psychophysiological measurement in the diagnosis of post-traumatic stress disorder: Results from a Department of Veterans Affairs Cooperative Study. Journal of Consulting and Clinical Psychology,*66*, 914-923.

Kessler, R.C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C.B. (1995). Post-traumatic stress disorder in the National Comorbidity Survey. Archives of General Psychiatry,*52*, 1048-1060.

Kimerling, R. & Calhoun, K.S. (1994). Somatic symptoms, social support, and treatment seeking among sexual assault victims. Journal of Consulting and Clinical Psychology,*62*, 333-340.

King, D.W., King, L.A., Keane, T.M., Foy, D.W., & Fairbank, J.A. (1999). Post-traumatic stress disorder in a national sample of female and male Vietnam veterans: Risk factors, war-zone stressors, and resilience-recovery variables. Journal of Abnormal Psychology,*108*, 164-170.

Koss, M.P., Koss, P.G., & Woodruff, M.S. (1991). Deleterious effects of criminal victimization on women's health and medical utilization. Archives of Internal Medicine,*151*, 342-347.

Kulka, R.A., Schlenger, W.E., Fairbank, J.A., Hough, R.L., Jordan, B.D., Marmar, C.R., & Weiss, D.S. (1990). Trauma and the Vietnam War generation: Report of findings from the National Vietnam Veterans Readjustment Study. New York: Brunner/Mazel.

Leskin, G.A. & Westrup, D.A. (1999). Theoretical and empirical approaches to PTSD screening measurement construction. In A. Prins (Chair), Screening for PTSD in Primary Care. Symposium presentation presented at the 15th Annual Meeting of the International Society for Traumatic Stress Studies, Miami, FL.



Post-Traumatic Stress Disorder: Implications for Primary Care

162

Lipton, M. & Schaffer, W. (1986). Post-traumatic stress disorder in the older veteran. Military Medicine,151, 522-524.

Lisak, D. (1994). The psychological impact of sexual abuse: Content analysis of interviews with male survivors. Journal of Traumatic Stress,7, 525-548.

Lish, J.D. Zimmerman, M. Farber, N.J., Lush, D.T., Kuzma, M., & Plescia, G. (1996). Suicide screening in a primary care setting at a Veterans Affairs medical center. Psychosomatics,37, 5, 413-424.

Martin, L., Rosen, L.N., Durand, D.B., Stretch, R.H., & Knudson, K.H. (1998). Prevalence and timing of sexual assaults in a sample of male and female U.S. Army soldiers. Military Medicine,163, 213-216.

McEwen, B. (1998). Protective and damaging effects of stress mediators. New England Journal of Medicine,338, 171-179.

McIntyre, L.M., Butterfield, M.I., Nanda, K., Parsey, K., Stechuchak, K.M., McChesney, A.W., Koons, C., & Bastian, L.A. (1999). Validation of a trauma questionnaire in veteran women. Journal of General Internal Medicine,14, 186-189.

Mental Health Strategic Healthcare Group (1997). VHA Program Guide 1103.2. Provision of Primary Care Services for Mental Health Clinicians. Veterans Health Administration: Washington, D.C.

Mental Health Strategic Healthcare Group and Major Depressive Disorder Working Group (1997). Veterans Health Administration Clinical Guideline for Major Depressive Disorder (MDD), MDD with Post-traumatic Stress Disorder (PTSD), and MDD with Substance Abuse (SD). Veterans Health Administration: Washington, D.C.

Murdoch, M., Halek, K., Fortier, L., Van Ryn, M., & Hodges, J. (2001). Service connection for post-traumatic stress disorder (PTSD) disability benefits depend on race, region, and gender. Paper presented at the VA HSR&D 19th Annual Meeting, Washington, D.C.

Murdoch, M. & Nichol, K. (1995). Women Veterans' experiences with domestic violence and with sexual harassment while in the military. Archives of Family Medicine,4, 411-418.

Murdoch, M., O'Brien, N., Hodges, J., Hunt, C., Lehman, L., Cowper, D., Vessey, A., & Fox, L. (1997). Gender differences in Compensation and Pension claims approval for PTSD. Unpublished #GEN97-002, VA HSR&D.



Post-Traumatic Stress Disorder: Implications for Primary Care

163

National Center for Alaskan and Native Americans & National Center for PTSD (1997). Matsunaga Vietnam veterans project: final report (2 volumes). National Technical Information Service (PB98-126295).

Nishith, P., Mechanic, M.B., & Resick, P.A. (2000). Prior interpersonal trauma: The contribution to current PTSD symptoms in female rape victims. Journal of Abnormal Psychology,109, 20-25.

Orsillo, S.M., Roemer, L., Litz, B.T., Ehlich, P.J., & Friedman, M.J. (1998). Psychiatric symptomatology associated with contemporary peacekeeping: an examination of post-mission functioning among peacekeepers in Somalia. Journal of Traumatic Stress,11, 611-625.

Prins, A., Kimerling, R., Cameron, R., Oumiette, P.C., Shaw, J., Thrailkill, A., Sheikh, J. & Gusman, F. (1999). The Primary Care PTSD Screen (PC-PTSD). Paper presented at the 15th annual meeting of the International Society for Traumatic Stress Studies, Miami, FL.

Resnick, H.S., Kilpatrick, D.G., Dansky, B.S., Saunders, B.E., & Best, C.L. (1993). Prevalence of civilian trauma and post-traumatic stress disorder in a representative national sample of women. Journal of Consulting and Clinical Psychology,61, 984-991.

Robohm, J.S. & Bутtenheim, M. (1996). The gynecological care experience of adult survivors of childhood sexual abuse: A preliminary investigation. Women and Health,24, 59-75.

Rosenheck, R.A., Dausey, D.J., Frisman, L., & KasproW, W. (2000). Outcomes after initial receipt of Social Security benefits among homeless veterans with mental illness. Psychiatric Services,51, 1549-1554.

Schnurr, P.P., Friedman, M.J., & Green, B.L. (1996). Post-traumatic stress disorder among World War II mustard gas test participants. Military Medicine,161, 131-136.

Schnurr, P.P., Friedman, M.J., Sengupta, A., Jankowski, M.K., & Holmes, T. (2000). PTSD and utilization of medical treatment services among male Vietnam veterans. Journal of Nervous and Mental Disease,188, 496-504.

Schnurr, P.P. & Jankowski, M.K. (1999). Physical health and post-traumatic stress disorder: Review and synthesis. Seminars in Clinical Neuropsychiatry,4, 295-304.



Post-Traumatic Stress Disorder: Implications for Primary Care

164

Skinner, K.M., Kressin, N., Frayne, S., Tripp, T.J., Hankin, C.S., Miller, D.R., & Sullivan, L.M. (2000). The prevalence of military sexual assault among female Veterans Administration outpatients. Journal of Interpersonal Violence,15, 291-310.

Stein, M.B., McQuaid, J.R., Pedrelli, P., Lenox, R., & McCahill, M.E. (2000). Post-traumatic stress disorder in the primary care medical setting. General Hospital Psychiatry,22, 261-269.

Strosahl, K. (1998). Integrating behavioral health and primary care services: The primary mental health care model. In A. Blunt (Ed.), Integrated primary care: The future of medical and mental health collaboration. New York: W.W. Norton & Company.

Taft, C.T., Stern, A.S., King, L.A., & King, D.W. (1999). Modeling physical health and functional health status: The role of combat exposure, post-traumatic stress disorder, and personal resource attributes. Journal of Traumatic Stress,12, 3-23.

United States Merit Systems Protection Board (1995). Sexual harassment in the federal workplace: Trends, progress, continuing challenges. Washington, D.C.: Government Printing Office.

Vaillant, G.E., Sobowale, N.C., & McArthur, C. (1972). Some psychological vulnerabilities of physicians. New England Journal of Medicine,287, 372-375.

Venn, A. & Guest, C. (1991). Chronic morbidity of former prisoners of war and other Australian veterans. Medical Journal of Australia,155, 705-712.

Walker, E.A., Torkelson, N., Katon, W.J., & Koss, M.P. (1993). The prevalence rate of sexual trauma in a primary care clinic. Journal of the American Board of Family Practitioners,6, 465-471.

Walker, E.A., Unutzer, J., Rutter, C., Gelfand, A., Saunders, K., VonKorff, M., Koss, M.P., & Katon, W. (1999). Costs of health care use by women HMO members with a history of childhood abuse and neglect. Archives of General Psychiatry,56, 609-613.

Walker, L. (1977-1978). Battered women and learned helplessness. Victimology: International Journal,2, 525-534.

Wolfe, J., Schnurr, P.P., Brown, P.J. & Furey, J. (1994). Post-traumatic stress disorder and war-zone exposure as correlates of perceived health in female Vietnam War Veterans. Journal of Consulting and Clinical Psychology,62, 1235-1240.



Post-Traumatic Stress Disorder: Implications for Primary Care

165

Wolfe, J., Sharkansky, E.J., Read, J.P., Dawson, R., Martin, J.A., & Ouimette, P. (1998). Sexual harassment and assault as predictors of PTSD symptomatology among US female Persian Gulf War military personnel. Journal of Interpersonal Violence,*13*, 40-57.

Wolfe, J., Turner, K., Caulfield, M., Newton, T.L., Melia, K., Martin, J., & Goldstein, J. Gender and trauma as predictors of attrition from recruit training in the United States Marine Corps. Manuscript submitted for publication.

Wolfe, J., Erickson, D.J., Sharkansky, E.J., King, D.W., & King, L.A. (1999). Course and predictors of post-traumatic stress disorder among Gulf War veterans: A prospective analysis. Journal of Clinical Psychiatry,*67*, 520-528.

Zeiss, R.A. & Dickman, H.R. (1989). PTSD 40 years later: incidence and person-situation correlates in former POWs. Journal of Clinical Psychology,*45*, 80-87.



APPENDIX H

Annotated Bibliography

PTSD and Medical Services

Schnurr, P.P., Friedman, M.J., Sengupta, A., Jankowski, M.K., & Holmes, T. (2000). **PTSD and utilization of medical treatment services among male Vietnam veterans.** *Journal of Nervous and Mental Disease*, 188, 496-504.

This study investigated the effect of PTSD on help-seeking for physical problems. Merging two large data sets [the National Vietnam Veterans Readjustment Study and the Matsunaga Vietnam Veterans Project] resulted in a sample of 1,773 male Vietnam veterans from white, black, Hispanic, Native Hawaiian and Japanese American ethnic groups. Predictors of utilization included PTSD, other Axis I disorders and substance abuse. In analyses that adjusted only for age, PTSD was related to greater utilization of recent and lifetime VA medical services, and with recent inpatient care from all sources. Further analysis showed that the increased utilization associated with PTSD was not merely due to the high comorbidity between PTSD and other Axis I disorders. The uniqueness of the association between PTSD and medical utilization is discussed in terms of somatization and physical illness.

Hankin, C.S., Spiro, A., Miller, D.R., & Kazis, L. (1999). **Mental disorders and mental health treatment among U.S. Department of Veterans Affairs outpatients: The Veterans Health Study.** *American Journal of Psychiatry*, 156, 1924-1930.

The authors examined the self-reported presence and treatment of current depressive disorder, PTSD and alcohol-related disorder in a group of outpatient veterans. Data were obtained from the Veterans Health Study, a longitudinal investigation of male veterans' health. A representative sample of 2,160 outpatients (mean age = 62 years) was drawn from Boston-area U.S. Department of Veterans Affairs (VA) outpatient facilities. The participants completed screening measures for depression, PTSD and alcohol-related disorders. Mental health treatment was assessed by interviews. The screening criteria for at least one current mental disorder were satisfied by 40 percent (N = 856) of the patients. Screening rates were 31 percent (N = 676) for depression, 20 percent (N = 426) for PTSD and 12 percent (N = 264) for alcohol-related disorder. Patients who screened positive for current mental disorders were younger, less likely to be married or employed and more likely to report traumatic exposure than were those without mental disorders. Of those who met the screening criteria for any of the targeted mental disorders, 68 percent (N = 579) reported receiving mental health treatment. Younger Caucasian men and those who reported



Post-Traumatic Stress Disorder: Implications for Primary Care

167

more traumatic exposure were more likely to report receiving mental health treatment than were others who screened positively for mental disorders. **CONCLUSIONS:** Screening rates of depression and PTSD, and rates of mental health treatment, were considerably higher among these VA outpatients than among similar patients in primary care in the private sector. Although the VA is currently meeting the mental health care needs of its patients, future fiscal constraints could effect most adversely the treatment of non-Caucasian and older patients and those with a history of traumatic exposure.

Stein, M.B., McQuaid, J.R., Pedrelli, P., Lenox, R., & McCahill, M.E. (2000). **Post-traumatic stress disorder in the primary care medical setting.** General Hospital Psychiatry,22, 261-269.

The purpose of this study was to evaluate the utility of a screening instrument for PTSD (the PCL-C) in primary care and to examine co-morbidity, disability and patterns of health-care utilization among persons with PTSD in this setting. Adult English-speaking patients attending for routine medical care (N = 368) participated in a two-stage screening consisting of the administration of a self-report measure for PTSD (the PCL-C) followed by a structured diagnostic interview. Current (1-month) prevalence of PTSD was determined, as were current co-morbid disorders. Brief functional impairment and disability indices were administered and healthcare utilization in the prior six months was ascertained. 11.8 percent (standard error 1.7 percent) of primary care attendees met diagnostic criteria for either full or partial PTSD. Co-morbidity with major depression (61 percent of cases of PTSD) and generalized anxiety disorder (39 percent) was common, but less so with social phobia (17 percent) and panic disorder (six percent). Substance use disorder co-morbidity (22 percent) also was fairly common. Patients with PTSD reported significantly more functional impairment than patients without mental disorders. Patients with PTSD also made greater use of healthcare resources than patients not mentally ill.

Gebhart, R.J. & Neeley, F.L. (1996). **Primary care and PTSD.** National Center for PTSD Clinical Quarterly,6, 72- 74.

The evolution of patient care in the Veterans Health Administration (VHA) is bringing health care providers into closer contact with each other more than at any time in the past. As VHA moves to implement primary care as its preferred method of patient management, mental health and primary care providers are finding that they have much to discuss with each other. This is particularly true in the case of patients with PTSD.

Fifer, S.K., Mathias, S.D., Patrick, D.L., Mazonson, P.D., Lubeck, D.P., & Buesching, D.P. (1999). **Untreated anxiety among adult primary care patients in a health maintenance organization.** Archives of General Psychiatry,51, 740-750.



Post-Traumatic Stress Disorder: Implications for Primary Care

168

Untreated anxiety may be particularly difficult for primary care providers to recognize and diagnose because there are no reliable demographic or medical profiles for patients with this condition and because these patients present with a high rate of co-morbid psychological conditions that complicate selection of treatment. **METHOD:** A prospective assessment of untreated anxiety symptoms and disorders among primary care patients. **RESULTS:** Approximately 10 percent of eligible patients screened in clinic waiting rooms of a mixed-model health maintenance organization reported elevated symptoms and/or disorders of anxiety that were unrecognized and untreated. These patients with untreated anxiety reported significantly poorer functioning on both physical and emotional measures than “not anxious” comparison patients; in fact, these patients reported reduced functioning levels within ranges that would be expected for patients with chronic physical diseases, such as diabetes and congestive heart failure. The most severe reductions in functioning were reported by untreated patients whose anxiety was mixed with depression symptoms or disorders. **CONCLUSION:** Primary care providers may benefit from screening tools and consultations by mental health specialists to assist in recognition and diagnosis of anxiety symptoms and disorders alone and mixed with depression.

Newman, M.G., Clayton, L., Zullig, A., Cashman, L., Arnow, B.A., Dea, R., & Taylor, C.B. (2000). **The relationship of childhood sexual abuse and depression with somatic symptoms and medical utilization.** *Psychological Medicine*,30, 1063-1077.

BACKGROUND: Previous research suggests that childhood sexual abuse is associated with high rates of retrospectively reported medical utilization and medical problems as an adult. The goal of this study was to determine if abused females have higher rates of medical utilization using self-report and objective measures, compared with non-abused females. A further goal was to determine whether findings of prior research would be replicated when childhood physical abuse level was controlled. This study also examined the moderating impact of depressed mood on current health measures in this population. **METHODS:** Six hundred eight women recruited from a health maintenance organization completed self-report measures of health symptoms for the previous month and doctor visits for the previous year. Objective doctor records over a two-year period were examined for a subset of 136 of these women. **RESULTS:** Results showed significantly more self-reported health symptoms and more self-reported doctor visits in abused participants compared with those who reported no childhood history of sexual abuse. Objective doctor visits demonstrated the same pattern with abused participants exhibiting more visits related to outpatient surgery and outpatient internal medicine. In addition, persons who were both sexually abused and depressed tended to visit the emergency room more frequently and to have more inpatient internal medicine and ophthalmology visits than sexually abused participants who reported low, depressed mood and non-abused controls. **CONCLUSIONS:** These results replicate prior studies and suggest that current depression may moderate the relationship between sexual abuse and medical problems in adulthood.



Post-Traumatic Stress Disorder: Implications for Primary Care

169

Roesler, T.A. (2000). **Discovery of childhood sexual abuse in adults.** In R.M. Reece (Ed.), Treatment of child abuse: Common ground for mental health, medical and legal practitioners. Baltimore: Johns Hopkins University Press.

Primary care providers are likely to encounter adult victims of childhood sexual abuse in their practices, although often the history of abuse will not be volunteered by the patient but must be drawn out by the clinician. The abuse survivor is often a patient with multiple, unexplained complaints, all of which may be related to underlying depression or anxiety. PTSD is a significant feature in this group of patients, occurring in nearly three-quarters. The physician should communicate that abuse information is relevant to medical treatment and that support and therapy are available. While reporting abuse is mandatory, that consideration may be irrelevant to the discovery of childhood abuse in adults, although many victims may wish some sort of disclosure, particularly when the abuser continues to have contact with children.

Ruzek, J.I., & Garay, K. (1996). **Hospital trauma care and management of trauma-related psychological problems.** National Center for PTSD Clinical Quarterly,6, 87-90.

This article explores how the objectives of primary health care might be better integrated with the acute care of the physically injured, serving the intention of preventing chronic PTSD, other psychological morbidity, loss of productivity and increased health care services utilization.

Women

Hankin, C.S., Skinner, K.M., Sullivan, L.M., Miller, D.R., Frayne, S., & Tripp, T.J. (1999). **Prevalence of depressive and alcohol abuse symptoms among women VA outpatients who report experiencing sexual assault while in the military.** Journal of Traumatic Stress,12, 601-612.

Among a national sample of 3,632 women VA outpatients, we determined self-reported prevalence of sexual assault experienced during military service and compared screening prevalence for current symptoms of depression and alcohol abuse between those who did and did not report this history. Data were obtained by mailed questionnaire. Military-related sexual assault was reported by 23 percent. Screening prevalence for symptoms of current depression was three times higher and for current alcohol abuse was two times higher among those who reported experiencing military-related sexual assault. Recent mental health treatment was reported by 50 percent of those who reported experiencing sexual assault during military service and screened positive for symptoms of depression, and by 40 percent of those who screened positive for symptoms of alcohol abuse.



Post-Traumatic Stress Disorder: Implications for Primary Care

170

Arnow, B.A., Hart, S., Scott, C., Dea, R., O'Connell, L., & Taylor, C.B. (1999). **Childhood sexual abuse, psychological distress and medical use among women.** *Psychosomatic Medicine*, 61, 762-770.

This study examined the relationships between reported history of childhood sexual abuse (CSA), psychological distress and medical utilization among women in a health maintenance organization (HMO) setting. **METHODS:** Participants were 206 women aged 20 to 63 years who were recruited from an HMO primary care clinic waiting area. Participants were classified, using screening questionnaires and the revised Symptom Checklist 90, as (1) CSA-distressed, (2) distressed only, (3) CSA only, or (4) control participants. Medical utilization rates were generated from the computerized database of the HMO for (1) non-psychiatric outpatient, (2) psychiatric outpatient, (3) emergency room (ER), and (4) inpatient admissions. **RESULTS:** CSA-distressed and distressed only groups both used significantly more non-psychiatric outpatient visits than CSA only and control participants but were not different from one another. CSA only and control participants did not differ on non-psychiatric outpatient utilization. CSA-distressed participants used significantly more ER visits and were more likely to visit the ER for pain-related complaints than other participants. Among CSA-distressed participants, those who met criteria for physical abuse had significantly more ER visits than those who did not. There were no differences among the four groups in inpatient utilization rates. **CONCLUSIONS:** Psychological distress is associated with higher outpatient medical utilization, independent of CSA history. History of CSA with concomitant psychological distress is associated with significantly higher ER visits, particularly for those with a history of physical abuse. History of CSA without distress is not associated with elevated rates of medical utilization. Screening for psychological distress, CSA and physical abuse may help to identify distinct subgroups with unique utilization patterns.

Butterfield, M.I., McIntyre, L.M., Stechuchak, K.M., Nanda, K., Bastian, L.A. (1998). **Mental disorder symptoms in veteran women: impact of physical and sexual assault.** *Journal of the American Medical Women's Association*, 53, 4, 198-200.

OBJECTIVES: To examine the relationship between a history of traumatic experiences including sexual trauma and battering that may have occurred during military tour and current mental health symptoms. **METHODS:** Cross-sectional survey of 632 consecutive women veterans in primary care using a trauma questionnaire and the patient questionnaire used in the PRIME-MD study to screen for symptoms of depression, anxiety, panic and alcohol abuse. **RESULTS:** Twenty percent reported childhood sexual trauma, 22% had been raped, and 26% had been battered. One-third of the rapes and 22% of the batterings occurred during the woman's military service. Thirty-seven percent of the women reported depression, 54% generalized anxiety, 16% panic, 13% alcohol abuse, and 49% reported six



Post-Traumatic Stress Disorder: Implications for Primary Care

171

or more somatic complaints. An increasing level of trauma was associated with an increased prevalence of mental disorder symptoms. Women with multiple traumas, at least one of which occurred during the military tour, had significantly higher prevalence of mental disorder symptoms than women whose multiple traumas did not occur during their military tour.

Walker, E.A., Unutzer, J., Rutter, C., Gelfand, A.N., Saunders, K., Von Korff, M., Koss, M.P. & Katon, W.J. (1999). **Costs of health care use by women HMO members with a history of childhood abuse and neglect.** *Archives of General Psychiatry*,56, 609-613.

BACKGROUND: Early childhood maltreatment has been associated with adverse adult health outcomes, but little is known about the magnitude of adult health care use and costs that accompany maltreatment. We examined differences in annual health care use and costs in women with and without histories of childhood sexual, emotional or physical abuse or neglect. **METHODS:** A random sample of 1,225 women members of a health maintenance organization completed a 22-page questionnaire inquiring into childhood maltreatment experiences as measured by the Childhood Trauma Questionnaire. Health care costs and use data were obtained from the automated cost-accounting system of the health maintenance organization, including total costs, outpatient and primary care costs and emergency department visits. **RESULTS:** Women who reported any abuse or neglect had median annual health care costs that were \$97 (95 percent confidence interval, \$0.47-\$188.26) greater than women who did not report maltreatment. Women who reported sexual abuse had median annual health care costs that were \$245 (95 percent confidence interval, \$132.32-\$381.93) greater than costs among women who did not report abuse. Women with sexual abuse histories had significantly higher primary care and outpatient costs and more frequent emergency department visits than women without these histories. **CONCLUSION:** Although the absolute cost differences per year per woman were relatively modest, the large number of women in the population with these experiences suggests that the total costs to society are substantial.

Skinner, K.M., Kressin, N., Frayne, S., Tripp, T.J., Hankin, C.S., Miller, D.R., & Sullivan, L.M. (2000). **The prevalence of military sexual assault among female Veterans Affairs outpatients.** *Journal of Interpersonal Violence*,15, 291-310.

Considerable publicity has focused on sexual violence among military women. The authors report the prevalence of military sexual violence and make comparisons among women veterans who report they experienced sexual violence while in the military and those who did not. Data are from the Veterans Affairs (VA) Women's Health Project, which was designed to assess the health status of women veterans receiving VA ambulatory care. The nationally representative sample (N = 3,632) consists of female veterans who had at



Post-Traumatic Stress Disorder: Implications for Primary Care

172

least one ambulatory visit at a VA facility between July 1, 1994, and June 30, 1995. More than half (55 percent) of the women report they were sexually harassed while in the military, and almost one quarter (23 percent) report they were sexually assaulted. There are differences in sociodemographic characteristics, military experiences and current health perceptions of women who reported sexual harassment or sexual assault while in the military as compared to those who did not. The prevalence of military sexual harassment and sexual assault is high and screening for sexual assault is important in all women patients given the differences between groups

Read, J.P., Stern, A.L., Wolfe, J., & Ouimette, P.C. (1997). **Use of a screening instrument in women's health care: Detecting relationships among victimization history, psychological distress and medical complaints.** *Women and Health*, *25*, 1-17.

The interactive relationship between psychological distress and physical health is a particularly salient one for women. Routine screening for abuse history and current psychological disturbance is essential in providing comprehensive patient care. The present study examines the utility of a brief screening measure in detecting psychological factors in female patients at a primary care facility. Sixty-nine percent of 108 women screened at a women's health clinic reported a history of trauma and almost half (49 percent) reported having been sexually harassed. Women presenting to treatment for gynecological problems were more likely to be victims of sexual assault and were more likely to report a history of childhood sexual abuse. In addition, women seeking specialized health care also reported increased rates of stress. Relationships among victimization histories, substance use and eating disturbances were also found. These data suggest the importance of assessing psychological disturbances and trauma histories as part of a comprehensive medical evaluation.

Steiner, J.L., Hoff, R.A., Moffett, C., Reynolds, H., Mitchell, M., & Rosenheck, R.A. (1998). **Preventive health care for mentally ill women.** *Psychiatric Services*, *49*, 696-698.

Utilization of preventive medical care was compared for two low-income groups – 47 women with serious mental illness in an urban mental health center and 17 women patients at a primary care center. Appropriate preventive care was defined as at least one physical examination, a PAP test and a breast examination in the past five years and a mammogram if the patient was over age 40. Receipt of preventive care by women in both settings was similar. Histories of physical and sexual abuse were prevalent in both groups, and a history of abuse was associated with less frequent receipt of preventive care. Results indicate that procedures to identify and provide services to women with abuse histories should be further developed.



Post-Traumatic Stress Disorder: Implications for Primary Care

173

Fontana, A., & Rosenheck, R.A. (1998). **Duty-related and sexual stress in the etiology of PTSD among women veterans who seek treatment.** *Psychiatric Services*,*49*, 658-662.

The stressful experiences of women serving in the military have been a focus of increasing concern. A model of the impact of stress related to military duty and stress related to sexual abuse and harassment on the development of PTSD among female veterans was evaluated. **METHODS:** Structural equation modeling was applied to data from 327 women treated in a VA clinical program for women with stress disorders. The model was a chronological one and included variables related to the women's pre-military experience, their military service and their post-military experience. **RESULTS:** Altogether, 48 percent of the sample served overseas and 12 percent were exposed to enemy fire. A total of 63 percent reported experiences of physical sexual harassment during military service, and 43 percent reported rape or attempted rape. Both duty-related and sexual stress were found to contribute separately and significantly to the development of PTSD. Sexual stress was found to be almost four times as influential in the development of PTSD as duty-related stress. Post-military social support played a highly significant mediational role between sexual stress during military service and development of PTSD. **CONCLUSIONS:** Women's exposure to sexual stress in the military is much more prevalent than previously believed. It is particularly toxic for the development of PTSD. Correct assessment is essential to effective treatment.

Chrestman, K.R., Prins, A., & Koss, M.P. (1996). **Enhancement of primary care treatment for women trauma survivors.** *National Center for PTSD Clinical Quarterly*,*6*, 83-86.

Women who have experienced violence are more likely to turn to their primary care provider for help than to mental health professionals, police officers or lawyers. In other words, primary care providers will often be the first, and in many cases the only health care provider to interact with the woman about her trauma-related symptoms. In this article, a few guidelines are provided for primary care providers on how to detect and respond to a history of interpersonal violence in primary care patients. Also examined are the implications of such a trauma history for the delivery of medical care and procedures.

PTSD, Health, and Medical Disorders

Schnurr, P.P., & Jankowski, M.K. (1999). **Physical health and post-traumatic stress disorder: Review and synthesis.** *Seminars in Clinical Neuropsychiatry*,*4*, 295-304.

This article reviews the empirical evidence on PTSD and physical health and considers this evidence in light of the physical health outcomes associated with other psychiatric



Post-Traumatic Stress Disorder: Implications for Primary Care

174

disorders. The existing data show that PTSD is associated with poor self-reported health and increased utilization of medical services. To a lesser extent, the data also show an association between PTSD and increased morbidity. Possible psychological, behavioral, and biological mechanisms are discussed, and a model integrating these mechanisms is presented.

Drossman, D.A. (1997). **Irritable bowel syndrome and sexual/physical abuse history.** European Journal of Gastroenterology and Hepatology,9, 327-330.

There is growing evidence that a history of sexual or physical abuse can affect emotional and physical well-being. Within gastroenterology, attention has focused on the increased frequency of abuse history, particularly for patients with refractory functional gastrointestinal (GI) disorders. Furthermore, regardless of diagnosis, abuse history can impair health status and one's ability to cope with one's medical condition. Especially for patients with painful functional GI disorders resistant to usual treatments, the physician should inquire in a supportive manner about the possibility of a prior abuse history or other psychosocial traumas (e.g., major loss). This then can lead to an appropriate mental health referral (along with continued medical care) and an improved clinical outcome.

Hoff, R.A., Beam-Goulet, J., & Rosenheck, R.A. (1997). **Mental disorder as a risk factor for human immunodeficiency virus infection in a sample of veterans.** Journal of Nervous and Mental Disease,185, 556-560.

People who suffer from mental disorders are at increased risk for becoming infected with HIV. There have been no studies that show whether particular psychiatric disorders present an increased risk for HIV infection in samples of non-patients. This article uses data from the 1992 National Survey of Veterans to determine if veterans with PTSD, or with other mental or emotional problems, are at increased risk for HIV infection. The results indicate that the combination of PTSD and substance abuse increased the risk of HIV infection by almost 12 times over those without either. This is evidence of a particular psychiatric disorder increasing risk for HIV. Although cross-sectional, these data allow some conjecture about the timing of the onset of PTSD in relation to HIV infection. These results present powerful evidence that mentally ill persons such as those with PTSD, who may be underserved for health services, including AIDS prevention efforts, should be targeted as an at-risk group.

Walker, E.A., Keegan, D., Gardner, G., Sullivan, M., Katon, W.J., & Bernstein, D.P. (1997). **Psychosocial factors in fibromyalgia compared with rheumatoid arthritis: I, Psychiatric diagnoses and functional disability.** Psychosomatic Medicine,59, 565-571.



Post-Traumatic Stress Disorder: Implications for Primary Care

175

OBJECTIVE: Recent studies of the relationship between fibromyalgia and psychiatric disorders have yielded conflicting findings, and many of these inconsistencies seem to result from methodological differences. **METHOD:** We compared 36 patients with fibromyalgia and 33 patients with rheumatoid arthritis from a tertiary care clinic using physician-administered, structured psychiatric interviews and self-reported measures of illness appraisal, coping and functional disability. **RESULTS:** Patients with fibromyalgia had significantly higher lifetime prevalence rates of mood and anxiety disorders, as well as higher mean numbers of medically unexplained physical symptoms across several organ systems. Ninety percent of the patients with fibromyalgia had a prior psychiatric diagnosis compared with less than half of the patients with rheumatoid arthritis. **CONCLUSIONS:** Despite the absence of organic pathology, the patients with fibromyalgia had equal or greater functional disability and were less well adapted to their illness. Although the pathophysiology of fibromyalgia remains unclear, co-morbid psychiatric disorders and functional disability remain an important focus of treatment in this population. **KEY WORDS:** Fibromyalgia; disability; rheumatoid arthritis; psychiatric diagnoses; psychosocial factors; epidemiology

Walker, E.A., Gelfand, M.D., Gelfand, A.N., Creed, F., & Katon, W.J. (1996). **The relationship of current psychiatric disorder to functional disability and distress in patients with inflammatory bowel disease.** *General Hospital Psychiatry*, 18, 220-229.

Although prior theories about psychiatric disorders causing inflammatory bowel disease (IBD) have largely been discredited, these same disorders have at times been associated with functional gastrointestinal symptoms such as those found in irritable bowel syndrome. Since functional gastrointestinal symptoms also can occur in patients with organic pathology, we hypothesized that a current psychiatric disorder might amplify or produce additional gastrointestinal symptoms in patients with organic gastrointestinal diseases such as IBD, leading to additive functional disability and decreased quality of life. This pilot study evaluated a sequential sample of 40 IBD patients using the NIMH Diagnostic Interview Schedule, structured interviews for functional gastrointestinal symptoms, and prior episodes of emotional, physical and sexual abuse, as well as self-reported measures of personality and disability. We compared IBD patients with and without a current psychiatric disorder while controlling for disease severity. Eight patients with major depression were treated with antidepressants. Patients with a current psychiatric disorder had significantly higher 1) mean number of lifetime psychiatric diagnoses, 2) prevalence rates of prior sexual and physical victimization, and 3) mean numbers of both gastrointestinal and other medically unexplained symptoms, despite no differences in severity of IBD. Significant and trend level differences were apparent on several measures of functional disability. A regression analysis showed that number of psychiatric diagnoses, number of functional gastrointestinal symptoms and dissociation scale scores significantly discrimi-



Post-Traumatic Stress Disorder: Implications for Primary Care

176

nated the groups. Treatment of current major depression decreased functional disability, despite no objective changes in gastrointestinal disease severity. It was concluded that the presence of a current psychiatric disorder appears to alter the perception of disease severity in patients with IBD. Non-recognition of the psychiatric disorder may lead to unnecessary and aggressive interventions for IBD patients such as medication changes, invasive testing or surgery. The presence of a current psychiatric illness also appears to be associated with increased functional disability. Psychiatric evaluation and treatment, therefore, have an important role in the ongoing management of IBD patients with distressing gastrointestinal symptoms not directly attributable to their IBD.

Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S. (1998). **Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study.** *American Journal of Preventive Medicine*, 14, 245-258.

The relationship of health risk behavior and disease in adulthood to the breadth of exposure to childhood emotional, physical or sexual abuse and household dysfunction during childhood has not previously been described. **METHOD:** A questionnaire about adverse childhood experiences was mailed to 13,494 adults who had completed a standardized medical evaluation at a large HMO; 9,508 (70.5 percent) responded. Seven categories of adverse childhood experiences were studied: psychological, physical or sexual abuse; violence against mother; or living with household members who were substance abusers, mentally ill or suicidal or imprisoned. The number of categories of these adverse childhood experiences then was compared to measures of adult risk behavior, health status and disease. Logistic regression was used to adjust for effects of demographic factors on the association between the cumulative number of categories of childhood exposures (range: 0-7) and risk factors for the leading causes of death in adult life. **RESULTS:** More than half of respondents reported at least one, and one-fourth reported [two or more] categories of childhood exposures. We found a graded relationship between the number of categories of childhood exposure and each of the adult health risk behaviors and diseases that were studied ($P < .001$). Persons who had experienced four or more categories of childhood exposure, compared to those who had experienced none, had 4- 12-fold increased health risks for alcoholism, drug abuse, depression and attempted suicide; a 2- 4-fold increase in smoking, poor self-rated health, [50 or more] sexual intercourse partners and sexually transmitted disease, and a 1.4- 1.6-fold increase in physical inactivity and severe obesity. The number of categories of adverse childhood exposures showed a graded relationship to the presence of adult diseases, including ischemic heart disease, cancer, chronic lung disease, skeletal fractures and liver disease. The seven categories of adverse childhood experiences were strongly interrelated and persons with multiple categories of childhood exposure were likely to have multiple health risk factors later in life. **CONCLUSIONS:** We



Post-Traumatic Stress Disorder: Implications for Primary Care

177

found a strong graded relationship between the breadth of exposure to abuse or household dysfunction during childhood and multiple risk factors for several of the leading causes of death in adults.

Engel, C.C., Liu, X., McCarthy, B.D., Miller, R.F., & Ursano, R.J. (1999). **Relationship of physical symptoms to post-traumatic stress disorder among veterans seeking care for Gulf War-related health concerns.** *Psychosomatic Medicine*,*62*, 739-745.

OBJECTIVES: Studies of the relationship of PTSD to physical symptoms in war veterans consistently show a positive relationship. However, traumatic experiences causing PTSD may correlate with other war exposures and medical illnesses potentially accounting for those symptoms. **METHODS:** We analyzed data obtained from 21,244 Gulf War veterans seeking care for war-related health concerns to assess the relationship of PTSD to physical symptoms independent of environmental exposure reports and medical illness. At assessment, veterans provided demographic information and a checklist of 15 common physical symptoms and another one of 20 wartime environmental exposures. Up to seven ICD-9 provider diagnoses were ranked in order of estimated clinical significance. The relationship of provider-diagnosed PTSD to various physical symptoms and to the total symptom count then was determined in bivariate and multivariate analyses. **RESULTS:** Veterans diagnosed with PTSD endorsed an average of 6.7 (SD = 3.9) physical symptoms, those with a non-PTSD psychological condition endorsed 5.3 (3.5), those with medical illness endorsed 4.3 (3.4), and a group diagnosed as “healthy” endorsed 1.2 (2.2). For every symptom, the proportion of veterans reporting the symptom was highest in those with PTSD, second highest in those with any psychological condition, third highest in those with any medical illness and lowest in those labeled as healthy. The PTSD-symptom count relationship was independent of demographic characteristics, veteran-reported environmental exposures and co-morbid medical conditions, even when symptoms overlapping with those of PTSD were excluded. **CONCLUSIONS:** PTSD diminishes the general health perceptions of care-seeking Gulf War veterans. Clinicians should carefully consider PTSD when evaluating Gulf War veterans with vague, multiple or medically unexplained physical symptoms.

Wagner, A.W., Wolfe, J., Rotnitsky, A., Proctor, S.P., & Erickson, D.J. (2000). **An investigation of the impact of post-traumatic stress disorder on physical health.** *Journal of Traumatic Stress*,*13*, 41-55.

In a large sample of Gulf War Veterans [the Fort Devens Operation Desert Storm Reunion Survey] (N = 2301), we examined the relations between PTSD symptoms assessed immediately upon returning from the Gulf War and self-reported health problems assessed 18-24 months later. PTSD symptomatology was predictive of self-reported health problems over time for both men and women veterans, even after the effects of combat exposure were removed from the analysis. Female veterans reported significantly more health problems



Post-Traumatic Stress Disorder: Implications for Primary Care

178

than male veterans; however, there was no interactive effect of gender and PTSD on health problems. These findings provide further support for the theory that psychological response to stressors impacts health outcome.

Walker, E.A., Gelfand, A.N., Katon, W.J., Koss, M.P., Von Korff, M., Bernstein, D.E., & Russo, J. (1999). **Adult health status of women with histories of childhood abuse and neglect.** *American Journal of Medicine*, 107, 332-339.

PURPOSE: Several recent studies have found associations between childhood maltreatment and adverse adult health outcomes. However, methodological problems with accurate case determination, appropriate sample selection and predominant focus on sexual abuse have limited the generalizability of these findings. **SUBJECTS AND METHODS:** We administered a survey to 1,225 women who were randomly selected from the membership of a large, staff model health maintenance organization in Seattle, Washington. We compared women with and without histories of childhood maltreatment experiences with respect to differences in physical health status, functional disability, numbers and types of self-reported health risk behaviors, common physical symptoms and physician-coded ICD-9 diagnoses. **RESULTS:** A history of childhood maltreatment was significantly associated with several adverse physical health outcomes. Maltreatment status was associated with perceived poorer overall health (ES = 0.31), greater physical (ES = 0.23) and emotional (ES = 0.37) functional disability, increased numbers of distressing physical symptoms (ES = 0.52), and a greater number of health risk behaviors (ES = 0.34). Women with multiple types of maltreatment showed the greatest health decrements for both self-reported symptoms ($r = 0.31$) and physician-coded diagnoses ($r = 0.12$). **CONCLUSIONS:** Women with childhood maltreatment have a wide range of adverse physical health outcomes.

Schnurr, P., & Spiro, A. (1999). **Combat exposure, post-traumatic stress disorder symptoms and health behaviors as predictors of self-reported physical health in older veterans.** *Journal of Nervous and Mental Disease*, 187, 353-359.

We used path analysis to model the effects of combat exposure, PTSD symptoms and health behaviors on physical health. Participants were 921 male military veterans from the Normative Aging Study. Their mean age at the time of study was 65. Measures of combat exposure, PTSD symptoms, smoking and alcohol problems were used to predict subsequent self-reported physical health status. Both combat exposure and PTSD were correlated with poorer health. In path analysis, combat exposure had only an indirect effect on health status, through PTSD, whereas PTSD had a direct effect. Smoking had a small effect on health status but did not mediate the effects of PTSD, and alcohol was unrelated to health status. We conclude that PTSD is an important predictor of physical health and encourage further investigation of health behaviors and other possible mediators of this relationship.



Post-Traumatic Stress Disorder: Implications for Primary Care

179

Treatment for PTSD

Foa, E.B., Keane, T.M., & Friedman, M.J. (2000). **Effective treatments for PTSD: Practice guidelines from the International Society of Traumatic Stress Studies**. New York: Guilford Press.

The treatment guidelines presented in this book were developed under the auspices of the PTSD Treatment Guidelines Task Force established by the Board of Directors of the International Society for Traumatic Stress Studies (ISTSS) in November 1997. Our goal was to develop a set of treatment guidelines based on an extensive review of the clinical and research literature prepared by experts in one field. The book consists of two parts. The first comprises the position papers that describe the salient literature; the second, the much briefer treatment guidelines. These guidelines are intended to inform the clinician on what we determined were the best practices in the treatment of individuals with a diagnosis of PTSD.

Follette, V.M., Ruzek, J.I., & Abueg, F.R. (1998). **Cognitive-behavioral therapies for trauma**. New York: Guilford Press.

This book is intended to provide the reader with a detailed accounting of the current state of cognitive-behavioral treatments of trauma symptoms. It provides a focus on a variety of traumatic experiences (e.g., combat, rape and child sexual assault and domestic violence) with the goal of bridging the gap between various trauma literatures; a grounding in theory and empirical research, so that treatment design is informed by the current state of knowledge regarding trauma, with extended attention to the pragmatics of treatment to help translate theory and research into usable, clinician-friendly therapeutic practices. TOPICS TREATED: A contextual analysis of trauma: assessment and treatment; outcome research on behavioral and cognitive-behavioral treatments for trauma survivors; a functional analysis of trauma symptoms; cognitive-behavioral treatment of war-zone-related PTSD: a flexible, hierarchical approach; intrusion, arousal, and avoidance: sexual trauma survivors; cognitive therapy for trauma-related guilt; anger and trauma: conceptualization, assessment, and treatment; dissociative behavior; assessment and treatment of concurrent PTSD and substance abuse; acceptance and trauma survivors: applied issues and problems; sexual revictimization: risk factors and prevention; healing interpersonal trauma with the intimacy of the therapeutic relationship; couples surviving trauma: issues and interventions; trauma in children; phenomenology and treatment of trauma in later life.

Friedman, M. J. (2001). **Post-traumatic stress disorder: The latest assessment and treatment strategies**. Kansas City: Compact Clinicals.



Post-Traumatic Stress Disorder: Implications for Primary Care

180

This book is a condensed, jargon-free review of Post Traumatic Stress Disorder, which included what is involved in making an accurate diagnosis, what symptoms mean and which treatments are proven most effective. Specifically: Who is at risk for developing PTSD? What is the likelihood of recovery? What is the difference between PTSD and the new diagnosis Acute Stress Disorder? What is the latest information regarding “recovered memories?” How do you differentiate PTSD from other disorders with similar symptoms? What biological factors relate to PTSD? Also included are three symptom sets of PTSD DSM-IV diagnostic criteria, targeted case examples, global treatment issues, cognitive behavioral therapies, medical treatments for PTSD, biological underpinnings of PTSD and effectiveness of medications vs. psychological therapies.

Keane, T.M. (1998). **Psychological and behavioral treatments of post-traumatic stress disorder.** In P.E. Nathan & J.M. Gorman (Eds.), A guide to treatments that work. New York: Oxford University Press.

Several Type 1 and Type 2 randomized clinical trials (RCTs) have confirmed exposure therapy (including systematic desensitization, flooding, prolonged exposure and implosive therapy) and, to a lesser extent, anxiety management techniques (using both cognitive and behavioral strategies) as the psychosocial treatments of choice for PTSD. Eye-movement desensitization and reprocessing (EMDR), a recently introduced approach to the treatment of PTSD, has shown some promise, although its research base to date, consisting largely of open clinical trials, is inadequate.

Leskin, G.A., Kaloupek, D.G., & Keane, T.M. (1998). **Treatment for traumatic memories: Review and recommendations.** Clinical Psychology Review, 18, 983-1001.

The aim of this article is to provide recommendations concerning the use of exposure-based therapy for reduction of emotional responding to traumatic memories. Background for these recommendations consists of a summary of the literature on traumatic stress and symptoms of PTSD; an overview of biological, cognitive and behavioral models for traumatic memory; and a selective review of evidence for the effectiveness of therapeutic exposure as a treatment for trauma memories and PTSD. The recommendations themselves demonstrate how clinical decision making during the course of treatment might be informed by empirical evidence and theoretical models concerning human memory, as well as ethical and legal considerations that mark this topic.

Foy, D.W., Ruzek, J.I., Glynn, S.M., Riney, S., & Gusman, F.D. (1999). **Trauma focus group therapy for combat-related PTSD.** In Session: Psychotherapy in Practice, 3, 59-73.



Post-Traumatic Stress Disorder: Implications for Primary Care

181

Although individual therapy involving imaginal experiencing of the traumatic event has been found to be effective in treating PTSD, there is evidence that few trauma therapists actually use the technique. Moreover, symptom improvement has been found to favor intrusive symptoms, whereas avoidance and hyperarousal have been less effective. Additionally, there are several published reports documenting difficulties in implementing the treatment, ranging from client refusal, adverse reactions and therapist inexperience. In this article, we outline an alternative group form of exposure therapy, manualized trauma focus group therapy (TFGT), designed to overcome some of these implementation obstacles and to enhance the effects of imaginal exposure to include those chronic PTSD symptoms of avoidance and social isolation. We describe the cognitive behavioral and developmental models from which the approach was derived, present clinical guidelines and an illustrative session, discuss complications we have encountered in TFGT pilot studies and offer suggestions for improving future implementation.

Cultural Issues in PTSD

Marsella, A.J., Friedman, M.J., Gerrity, E.T., & Scurfield, R.M. (1996). **Ethnocultural aspects of post-traumatic stress disorder: Issues, research and clinical applications.** Washington, D.C.: American Psychological Association.

The purpose of this volume is to explore and examine the role of ethnocultural aspects of PTSD through a thorough and comprehensive discussion of current theory, research and practice on the topic. This chapter addresses the topic of ethnocultural variations and similarities in the etiology, distribution, expression, clinical diagnosis and treatment of PTSD and related stress disorders.

Friedman, M.J. (1998). **The Matsunaga Vietnam Veterans Project.** PTSD Research Quarterly, 9, 7.

Describes the Matsunaga Vietnam Veterans Project, an epidemiologic study of prevalence of PTSD, co-morbid psychiatric diagnoses, readjustment problems, physical health problems and clinical utilization among American Indian and Asian-Pacific Islander Vietnam veterans.

Stamm, B.H., & Friedman, M.J. (2000). **Cultural diversity in the appraisal and expression of trauma.** In A.Y. Shalev, R. Yehuda, & A.C. McFarlane (Eds.), International Handbook of Human Response to Trauma. New York: Kluwer Academic/Plenum Publishers.

The challenge that we face, when considering PTSD from a cross-cultural perspective, is to find an appropriate balance between modern and traditional conceptualizations of



Post-Traumatic Stress Disorder: Implications for Primary Care

182

traumatic exposure and its consequences. Each perspective has a richness and complexity that must be respected and understood if we hope to provide effective clinical interventions for trauma survivors from traditional backgrounds. To state one conclusion at the outset, the important question is not whether PTSD can be detected among trauma survivors from traditional ethnocultural backgrounds. Indeed, PTSD has been found among Southeast Asians, Latin Americans, Middle Easterners, American Indians and other trauma survivors from non-Western cultures. Rather, the important question is whether PTSD or some other idiom of distress reflects the best conceptualization of the impact of traumatic stress on survivors from certain ethnocultural groups.

Holman, A.E., Silver, R.C., & Waitzkin, H. (2000). **Traumatic life events in primary care patients: A study in an ethnically diverse sample.** *Archives of Family Medicine*, 9, 802-810.

OBJECTIVE: To examine among immigrants and others seeking primary care: (1) the prevalence, types and predictors of traumatic life events; and (2) the relations among traumatic life events, psychiatric disorders and utilization of primary care services. **DESIGN:** Survey with structured diagnostic interview. **SETTING:** Community-based, university-affiliated primary care clinic in southern California. **PARTICIPANTS:** 1,456 adult patients representing four ethnic groups (Mexican immigrants, Central American immigrants, U.S.-born Latinos of Mexican descent and U.S.-born non-Latino whites). **DEPENDENT MEASURES:** Rates of traumatic events measured with the PTSD section of the Diagnostic Interview Schedule; psychiatric disorders identified by the Composite International Diagnostic Interview using DSM-III; physical functioning (Short Form Health Survey); and the number of medical clinic visits during a six-month period. **RESULTS:** Nearly 10 percent of patients had experienced a traumatic event in the previous year, and 57 percent had experienced at least one during their lifetimes. The most common forms of trauma were interpersonal violence occurring outside the family (21 percent), acute losses or accidents (17 percent), witnessing death or violence (13 percent) and domestic violence (12 percent). When compared with the U.S.-born non-Latino whites, Mexican immigrants were half as likely and Central American immigrants were 76 percent more likely to report having experienced a traumatic event. Married individuals were significantly less likely to report traumas. Traumatic experiences, female gender and non-Latino ethnicity were associated with the presence of a psychiatric disorder. One-year and lifetime psychiatric disorders were associated with poorer physical functioning and an increased number of clinic visits during a six-month period. **CONCLUSIONS:** Traumatic life events are common and associated with psychiatric disorders other than PTSD in an ethnically diverse sample of primary care patients. Psychiatric disorders, in turn, are strongly associated with poor physical functioning and higher rates of primary care utilization. Screening for traumatic experiences should accompany assessments of psychiatric disorders to ensure adequate treatment of patients seeking primary care services.



Post-Traumatic Stress Disorder: Implications for Primary Care

183

Compensation-Seeking

Fontana, A., & Rosenheck, R.A. (1998). **Effects of compensation-seeking on treatment outcomes among veterans with post-traumatic stress disorder.** Journal of Nervous and Mental Disease, 186, 223-230.

The desire to acquire or increase financial compensation for a psychiatric disability is widely believed to introduce a response bias into patients' reports of their symptoms and their work performance. The hypothesized effects of compensation-seeking in inhibiting improvement from treatment are examined. Data from outpatient (N = 455) and inpatient (N = 553) programs for the treatment of PTSD and associated disorders in the Department of Veterans Affairs were used to compare outcomes for veterans who were and were not seeking compensation. Outcome was measured as pre/post improvement in symptoms and work performance over the course of one year after the initiation of treatment. No compensation-seeking effect was observed among outpatients, but a significant effect was found for some inpatients. The effect for inpatients was manifested essentially by patients in a program type which was designed to have an extremely long length of stay, thus triggering a virtually automatic increase in payments. Like outpatients, inpatients in programs with a moderate length of stay did not manifest a compensation-seeking effect on improvement. Although not permitting a definitive explanation, the preponderance of the evidence favors the overstatement of symptoms rather than either the severity or the chronicity of the disorder as the most likely explanation for the compensation-seeking effect that was observed. For patients treated in standard outpatient and short-stay inpatient programs, compensation does not seem to affect clinical outcomes adversely.

Disaster

Young, B.H., Ford, J.D., Ruzek, J.I., Friedman, M.J., & Gusman, F.D. (1998). **Disaster Mental Health Services: A Guidebook for Clinicians and Administrators.** Menlo Park, California: National Center for Post-Traumatic Stress Disorder.

Provides practical guidelines and background information to assist clinicians, administrators and their organizations to develop disaster mental health response strategies, disaster mental health team formation and maintenance and strategies for interfacing with the federal disaster response system.



Post-Traumatic Stress Disorder: Implications for Primary Care

Independent Study Test Questions for CME Credit

Using the Independent Study Participant Registration/Answer Sheet, please completely fill in the lettered box corresponding to your answer next to the appropriate number.

1. **Which of the following is NOT true regarding PTSD?**
 - a) Women are twice as likely as men to develop PTSD following exposure to traumatic events.
 - b) PTSD is likely to remain unrecognized and untreated in primary care patients.
 - c) Patients with PTSD experience a lesser degree of impairment than that observed in patients suffering from major depression.
 - d) Approximately 85% of male veterans have been exposed to traumatic events.
 - e) Traumatic experiences and traumatic stress bring about hormonal, neurochemical, immune functioning and autonomic nervous system changes, which can affect physical health.

2. **All of the following include examples of traumatic stressors, EXCEPT:**
 - a) Road traffic accidents
 - b) Interpersonal violence
 - c) Unexpected death of a close relative
 - d) Loss of a job
 - e) Natural disasters



Post-Traumatic Stress Disorder: Implications for Primary Care

185

3. **All of the following are important reasons for screening for PTSD in primary care, EXCEPT:**
 - a) Untreated PTSD can impair recovery from heart attacks, severe injuries and cancer.
 - b) PTSD has been shown to increase the risk of developing Alzheimer's disease.
 - c) PTSD is associated with significant problems in living.
 - d) PTSD has been associated with high levels of utilization of medical services.
 - e) While patients do not typically disclose trauma histories spontaneously, they usually will provide this information if queried directly.

4. **The Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV) specifies that, to be diagnosed with PTSD, the duration of symptoms must last MORE THAN:**
 - a) One week
 - b) Two weeks
 - c) One month
 - d) Two months
 - e) Six months

5. **The symptoms of PTSD listed in DSM-IV fall into three categories:**
 - a) Re-experiencing, avoidance and arousal symptoms
 - b) Affective, re-experiencing and avoidance symptoms
 - c) Avoidance, affective and arousal symptoms
 - d) Arousal, re-experiencing and affective symptoms
 - e) Dissociative, arousal and affective symptoms



Post-Traumatic Stress Disorder: Implications for Primary Care

186

6. **In addition to PTSD, individuals with a history of trauma are at heightened risk for developing other problems, most commonly including all of those below EXCEPT:**
 - a) Substance Abuse
 - b) Panic Disorder
 - c) Depression
 - d) Delusional Disorder
 - e) Generalized Anxiety Disorder

7. **A majority of veterans, particularly those whose traumatic (childhood or adult) experiences have involved exposure to human cruelty or perceived abuse of authority, have:**
 - a) Flights of ideas and delusions.
 - b) Irritability and anger.
 - c) Strong attachment to their own family.
 - d) A need to fit into society.
 - e) Increased conscientiousness in keeping themselves healthy.

8. **Exposure to traumatic stress and/or PTSD is associated with:**
 - a) Chronic pain (e.g., pelvic pain)
 - b) Gastrointestinal disorders (e.g., irritable bowel syndrome)
 - c) A variety of health threatening behaviors that can adversely affect health (e.g., smoking)
 - d) Increased health care utilization
 - e) All of the above



Post-Traumatic Stress Disorder: Implications for Primary Care

187

9. **For which of the following is screening mandated for all patients by VHA?**
 - a) Childhood physical abuse
 - b) Childhood sexual trauma
 - c) Military sexual trauma
 - d) Exposure to motor vehicle accidents
 - e) Exposure to disasters

10. **Which PTSD screening process is MOST recommended in the VA primary care setting?**
 - a) Routine screen administration to all patients
 - b) Screening only for patients with physical problems suggestive of trauma exposure
 - c) Screening only for patients with combat history
 - d) Screening only for patients with disruptive interpersonal behaviors
 - e) Screening only for patients who request it

11. **An advantage of the Primary Care PTSD Screen (PC-PTSD) is that it is:**
 - a) Electronic.
 - b) Symptom-oriented, rather than focusing on traumatic events.
 - c) Comprehensive.
 - d) Capable of diagnosing PTSD for the primary care clinician.
 - e) Illustrated.

12. **When screening for trauma:**
 - a) Questions should be behaviorally based (i.e., asking about experiences, rather than attaching labels like “rape” or “trauma” or “domestic violence” to those experiences).
 - b) Avoid discussion of domestic violence experiences to prevent patient discomfort.
 - c) Discuss all details of the trauma experience.
 - d) Immediately include family members in the discussion.
 - e) Questions should be vague and abstract, letting the patient interpret the meaning.



Post-Traumatic Stress Disorder: Implications for Primary Care

188

13. **In discussing screening results with patients, it may be helpful to:**
 - a) Share some of your other patients' traumatic experiences as a way to make the patient comfortable.
 - b) Encourage the patient to voice any concerns he or she might have about seeking treatment for this condition.
 - c) Use common terms such as "abuse" or "rape" so as not to speak over the patient's head.
 - d) Immediately involve family members in the discussion.
 - e) Avoid asking about ongoing stressors in the patient's life.

14. **A key message to convey to the patient when discussing screening results is:**
 - a) PTSD symptoms are uncommon in the general population, but manageable with help
 - b) The person with PTSD has a mental illness
 - c) Talking about all details of the trauma with the medical provider is necessary for proper screening
 - d) Treatment can help improve the veteran's life
 - e) Treatment can completely cure PTSD

15. **When asking about whether traumatic events are ongoing in a patient's life, if ongoing threats to safety are present, it is important to:**
 - a) Acknowledge the difficulty in seeking help when trauma has not stopped
 - b) Determine if reporting is legally mandated and, if so, develop a plan with the patient to make the report
 - c) Provide written information about local helping resources
 - d) Avoid value-laden terms such as "abuse" or "rape," especially if the patient does not use those terms
 - e) All of the above



Post-Traumatic Stress Disorder: Implications for Primary Care

189

16. **If the patient refuses referral to mental health, the primary care practitioner should:**
 - a) Respect the patient's wishes and never bring this topic up again.
 - b) Normalize the idea of treatment and educate the patient about trauma and treatment.
 - c) Make the referral anyway, and refuse to follow up with the patient unless he or she reports to mental health first.
 - d) Make the referral and hope the patient will follow up.
 - e) Call the mental health clinician into the room to discuss the referral with the patient.

17. **It will be helpful to the mental health professional who receives the referral to have:**
 - a) A copy of the PC-PTSD screening results.
 - b) Any relevant information about health events or injuries that might have been traumatic.
 - c) Information about any suspected negative impact of the patient's post-traumatic symptoms on health or medical compliance.
 - d) Any symptoms concordant with PTSD, as well as any historical information that the patient offers about his or her trauma.
 - e) All of the above

18. **Which of the following is the most appropriate question when screening for sexual trauma?**
 - a) "Were you ever sexually assaulted?"
 - b) "Did anyone ever rape you?"
 - c) "Were you ever the victim of incest?"
 - d) "Did you ever have an experience where someone used force or the threat of force to have sexual contact with you against your will?"
 - e) "Were you ever a victim of sexual abuse?"



Post-Traumatic Stress Disorder: Implications for Primary Care

190

19. **Provider attitudes that impede detection of traumatic, stress-related problems include:**
 - a) Fear that it is upsetting to the patient.
 - b) Belief that it will not do any good.
 - c) Concern about time constraints.
 - d) A and B, but not C
 - e) All of the above

20. **Of the following procedures, which is MOST likely to evoke a post-traumatic reaction in a sexual trauma survivor?**
 - a) Checking blood pressure
 - b) Colonoscopy
 - c) Taking an oral temperature
 - d) Checking for ear infection
 - e) Arm X-ray

21. **The type of psychotherapy for PTSD that has been BEST researched is:**
 - a) Family therapy.
 - b) Sand-tray therapy.
 - c) Cognitive-behavioral therapy.
 - d) Psychodynamic therapy.
 - e) Inpatient treatment.

22. **Generally, all of the following are goals of PTSD treatment EXCEPT:**
 - a) Helping the veteran better understand his or her reactions to trauma.
 - b) Allowing him or her to share experiences with other veterans with similar problems.
 - c) Teaching the veteran to better cope with painful memories, emotions and problems.
 - d) Helping the veteran to forget about his traumatic past.
 - e) Helping the veteran tackle his trauma-related problems, such as substance abuse or depression.



Post-Traumatic Stress Disorder: Implications for Primary Care

191

23. **The U.S. Food and Drug Administration has approved as an indicated treatment for PTSD:**
 - a) Sertraline (Zoloft)
 - b) Nefazadone (Serzone)
 - c) Valproate (Depakote)
 - d) Venlafaxine (Effexor)
 - e) Clonidine

24. **Recent large-scale trials suggest that Selective Serotonin Re-uptake Inhibitor (SSRI) treatment is effective for:**
 - a) Females, but not males.
 - b) Males, but not females.
 - c) Both males and females.
 - d) Neither males nor females.
 - e) Adults, but not children.

25. **Which of the following symptoms of PTSD can present as management problems in the medical setting?**
 - a) Re-experiencing
 - b) Avoidance
 - c) Hyperarousal
 - d) Dissociation
 - e) All of the above



Post-Traumatic Stress Disorder: Implications for Primary Care

192

26. **Which of the following are clearly INAPPROPRIATE boundary crossings in the physician-patient relationship?**
- a) Talking about the weather while walking the patient to your office
 - b) Sharing personal frustrations about your family with patients
 - c) Asking your nurse to chaperone a pelvic exam
 - d) Asking the patient how he or she has been functioning at work recently
 - e) Keeping to the allotted time for your appointment and rescheduling a follow-up the next week when your patient has a long list of problems
27. **Which of the following may be used to help PREVENT boundary crossings?**
- a) Always call your patients by their first names and encourage them to reciprocate in order to equalize your relationship
 - b) Share information with your patients about your foibles to help them see you as more human
 - c) Establish ground rules early on and stick to them
 - d) Refuse to discuss anything personal about your patients' lives
 - e) Put up a screen around your academic office
28. **Under what situation can compensation for sexual assault/domestic violence be paid by the Veterans Benefits Administration after military service?**
- a) Traumatic event occurred during military service
 - b) Compensable mental and/or physical disorder is diagnosed
 - c) Plausible link between the disorder and the traumatic event is established
 - d) All three of the above must be present
 - e) None of the above



Post-Traumatic Stress Disorder: Implications for Primary Care

193

29. **Which of the following are potential advantages of integrated primary care/mental health care?**
- a) Improved screening for mental health conditions
 - b) Improved primary care provider skills in prescribing medication for PTSD
 - c) Increased patient adherence to medication
 - d) Reduced premature treatment drop-out rates
 - e) All of the above
30. **Which of the following models of care offers 1) on-site mental health care; 2) routine screening of primary care patients for mental health disorders; 3) direct consultative services to primary care providers; and 4) brief treatment interventions for specific mental disorders like PTSD?**
- a) Separate Treatment Teams
 - b) Dual-Team Membership
 - c) Mental Health Participation in Medical Primary Care Teams
 - d) Primary Care Behavioral Healthcare Integrated Team
 - e) Traditional Consultation and Liaison