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## Preface

Since 9/11, 2001 approximately 2.7 US million service members have served in the wars in Afghanistan and Iraq. PTSD and traumatic brain injuries (TBI) have been called as the “signature wounds” of war. Approximately a quarter of service members deployed to war have PTSD. The psychological injuries of war, PTSD, moral injury, and related conditions, lead to other issues with employment and intimate relationships.

There are conventional, evidence-based therapies that are effective—if the service member or veteran is able to tolerate the treatments. As numerous chapters in this volume demonstrate, many cannot tolerate either pharmacotherapy or talking exposure-based therapies. For example, the treatment of PTSD involves medications that often have sexual side effects, which causes many to cease their use. In addition, service members often do not want to talk over and over about their combat experience, so may reject the treatments which involve reliving the traumas.

However, the clinicians in the military and veteran’s health-care systems are innovative. They have experimented with alternative ways to engage veterans. These include mindfulness, art therapy, stellate ganglion block, training service dogs, virtual reality, and more. All these and others are highlighted in this book. Not yet subjected to rigorous research, in many cases, these treatments are not yet officially approved in evidence-based guidelines or by the Food and Drug Administration.

PTSD from these wars seldom exists alone in our recent combat veterans. For example, the bomb blast has been the “signature weapon” of these conflicts. Service members wear helmets and body armor, which covers their torsos. Thus blasts primarily affect the lower exposed areas of the body, including the extremities and pelvic region. Numerous service members have lost a leg, and many have lost both legs and/or arms. In some cases they have lost part or all of their genitalia. The bomb blast or other weapons may also burn and scar faces and hands.

Pain from these injuries and subsequent surgeries is a constant theme. Pain has a host of consequences, including impacting sleep and decreasing sexual desire. Narcotics used to treat pain make sexual performance problematic. Too many start on prescription pain medications, and then become addicted to opioids. Overuse of alcohol is another constant problem.

In combat, TBI is commonly caused by blasts, gunshot wounds, and motor-vehicle events. The effects of TBI vary according to severity and location, but include cognitive difficulties, such as forgetfulness, irritability, and impulsivity. In addition

the injury may damage the pituitary gland, which in turn affects the endocrine system and the levels of the sexual hormones, testosterone and estrogen. Other medications used for treatment of pain and TBI cause a myriad of issues, such as weight gain, ejaculatory delay, and sedation.

Less well known is the impact of toxic exposures on mental and physical health. All wars are environmentally dirty. Agent Orange is the best known toxic agent from Vietnam. The cause of “Desert Storm syndrome” is still unknown, but is generally believed to be from a combination of exposure to burning petroleum, nerve agents, particulate sand, and psychological stress. Antimalarial agents, used in Iraq and Afghanistan, cause a host of neuropsychiatric effects. Sexual assault is another type of toxic exposure.

This book is an edited collection from many authors. It is designed primarily for a medical audience, but should be accessible to service members and their families who are looking for information on the treatment of PTSD.

The purpose of this volume is several folds. We want to encourage medical personnel to: (1) understand and discuss combat-related mental and physical health issues with their patients; (2) know how to evaluate and treat PTSD, along with related physical injury, pain, and disability; (3) learn how to mitigate the sexual side-effects of medications commonly used for TBI, PTSD, and pain; and (4) be able to keep their patients engaged and in treatment.

The target medical audience includes all providers who treat injured service members and veterans, including primary care providers, psychiatrists, psychologists, social workers, physical and occupational therapists, nurses, and others. The volume should be useful for all those who treat PTSD, not just military service members, as PTSD is a major issue in the civilian population. The volume is not written from the perspective of advocates. But we hope that those who advocate for veterans will draw lessons from these pages.

There are real human stories here. However, to protect patient privacy, details have been changed or stories blended in together. So the reader should consider these as composite cases, with teaching points emphasized, rather than identifiable actual patients.

I was delighted when Springer asked me to do this PTSD casebook. It is time for the entire therapeutic community to learn more about these alternative ways of connecting to combat veterans, who have given so much for their country, the USA and their allies.

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