Chapter One

INTRODUCTION

The central theme of this report may be summarized simply: The stresses of combat, deployment, or high threat environments can, for some military personnel, have both immediate and long-term disruptive physical and psychological consequences. Such consequences have been observed, documented, and pondered over at many points in human history and in many societies, cultures, and military organizations. For the majority of those afflicted, the symptoms experienced have been both psychological and physical. The relationship between these two categories of symptoms appears to have always been complex, with each symptom class probably contributing to the intensity of the other.

While some symptoms of combat stress appear to have been common to many eras and cultures, other symptoms and symptom clusters have varied through time. Still, while clusters of physical symptoms have varied, few if any “new” or previously unremarked symptoms have appeared over time. The structure of the human body and its physiology limit the repertoire of possible symptomatic responses (except perhaps when a new and terrible pathogen is encountered). This seems to be less true of psychological and psychosocial symptoms, which can alter over time as cultural beliefs and individual imaginations change.

As symptoms of combat stress have varied, so have the proposed causes of stress. In addition, there appears to be a relationship between the kind of symptoms exhibited and the causes to which they are attributed. Such changes in attribution of causality have obvious bases. Beliefs about the cause of symptoms are rooted in available knowledge, the assertions of the medical system of the time, and cultural assumptions about causality, danger, and risk (see, e.g., Douglas, 1984 and 1994; Douglas and Wildavsky, 1982).

As knowledge and assumptions in each of the domains of human understanding change, we see presumptions of causality change; it would appear that some of the symptoms change as well. It has been, unfortunately, all too common for some to assign causality to generic and presumably universal catch-
alls,¹ and most common postcombat and postdeployment symptomatic clusters have been and continue to be attributed to such ambiguous phrases as “the horrors of war,” “dehumanizing experiences of having been in the military” and similar, vague causal categories. In the past (and in some contemporary nonliterate cultures), causality has also been attributed to such categories as magic spells, the anger of the gods, etc. It was also common, particularly in the West, to attribute symptomatic combat responses to the moral or constitutional weakness of those suffering from them, rather than to specific combat experiences.

Throughout much of the human record, popular and medico/scientific views of causality have been reasonably, if not completely, correlated. Both appear to have been drawn from like sets of cultural assumptions. However, in the last 30 years, I believe we have seen a widespread fragmentation about the causes of postcombat symptoms. The proposed causes are manifold, wide-ranging, and often disparate. Some are certainly derived from the progress of medicine during the past 50 years and the consequent awareness of the threats posed by previously unknown pathogens (including slow viruses and prions). These threats are seen by many in the West as lurking in alien non-Western environments. Another, expanding set of constructs and beliefs both within segments of the medical community and popular culture has been the attribution of exceptionally deleterious effects of man-made toxins released into the environment. In some cases apprehensions are well founded, in others little or no scientific evidence to support widespread fears can be found. Other sources of belief about causality today include suspicion that government institutions are using uninformed populations as guinea pigs in covert experimentation. Tabloid journalism, radio and television talk shows, and Internet web pages reinforce such beliefs. Many of these paranoid and quasi-paranoid beliefs are reinforced consciously or unconsciously by political partisans, who see such consequences of combat as necessary moral outcomes or as statements about the morality or competence of a government. Another major contributing factor arises out of a tendency, on the part of at least some in the medical and scientific communities, to seek causality exclusively within their own fields of specialization or interest.

Trying to deal then, with the issues involved in the psychological and psychophysiological consequences of combat and deployment is not an easy matter. These issues are contentious, and sometimes rouse fierce partisanship. I

¹This has been true of sophisticated scientists and physicians as well as lay persons. In the recent scientific literature, for example, van der Kolk and his colleagues’ approach to the experience of a traumatic stressor and the generation of future posttraumatic stress disorder is one such example of extreme limitation of possible contributing causal factors combined with a presumed universal pattern of response (van der Kolk et al., 1996).
have chosen to use historical illustrations to try to provide a context for the present situation in order to help us better understand how stress can be considered to have contributed to Gulf War illnesses. Stress has been considered by almost every scientific committee that has held hearings on the issue of Gulf War illnesses (e.g., the Lederberg Committee, the Institute of Medicine, the National Institutes of Health Workshop, the Armed Forces Epidemiological Board, and the Presidential Special Oversight Committee).

What I try to do in this report is to demonstrate, in a general way, the interactions between medical beliefs, popular beliefs, and other aspects of cultural knowledge that appear to contribute to symptom patterns. I focus on symptomatic patterns of presentations of illness as defined in medical anthropology and medical sociology, as opposed to disease in the classical medical model. The medical or disease model focuses on the specific effects produced by a pathogen or pathophysiological process that lead to deviation from normal functioning as defined by biomedical measures. Illness is a cultural construct that refers to the way the individual organizes symptoms and feelings into a patterned whole, interprets it, assigns it a probable cause, and presents it to others. I use pieces of the historic past to illuminate patterns and changes in stress-related human and military experience and to provide a framework for the present. I am not attempting to write a comprehensive history of the role of stress and its consequences and treatment in military medicine through history; that would be a task of the utmost importance, and I hope that it will be undertaken with the detail and thoughtfulness that it requires. The historical segments I have chosen should be viewed as illustrative cases, not as definitive and exhaustive historical reconstruction.

My quest has been to elucidate a pattern in stress response. I believe that pattern has been continually present and shaped many of the responses we have seen and still see today. I believe that this is so, even though warfare has evolved and changed. What has not changed are the profound interactions between mind and body, which I believe serve as major contributing factors in the illnesses produced. The noted neurologist and neuroscientist Antonio Damasio, who has elegantly laid out how the brain transforms external events into internal neurophysiological events, has best described the model I follow (Damasio, 1994). The consequences of events experienced in combat and related deployments are never, I believe, “all in the mind”; they are transformed into potentially harmful events in the body as well. While not all soldiers appear to be vulnerable or at risk, vulnerability has little to do with bravery or the effective performance of the soldier’s duty. As several studies during World War II pointed out, men who suffered combat fatigue won proportionally just as many decorations for valor as did those who suffered physical wounds.
The Gulf War has been no exception to past combat and deployment, producing both psychological and physiological postcombat symptomatic responses. A number of casualties of the Gulf War have presented various physical, psychophysical, and psychological symptoms. Many of these share in the symptom experience of so-called “Gulf War syndrome.” Given the diversity of symptoms and illness presentations, the term “Gulf War illnesses” may be more appropriate (as used by the Presidential Committee on Gulf War Illnesses).

The proportion of malingerers among American military personnel in this century has been very low. Indeed, few of the casualties of the Gulf War appear to have consciously exaggerated their symptoms in hope of compensation, a common insult of the motives attributed to ex-service personnel. Almost all casualties have been described as people deeply concerned by the messages of their minds and bodies that have led them to consider that something untoward happened to them in the Persian Gulf.

Many of those afflicted with Gulf War illnesses, as well as many other Americans, apparently have come to the conclusion that Gulf War illnesses are “singular,” representing some sort of new and unique phenomenon. This has been true of some in the media, a segment of the medical establishment, and various others. Those who see Gulf War illnesses and their causes as singular believe them to be a spectrum of symptoms and ailments that has sprung de novo from some truly unique exposure that took place in the course of Operation Desert Shield/Desert Storm.

This concept of singularity might well have been predictable, given its invocation after the Vietnam conflict to explain several categories of postcombat casualties, as well as the widespread presently popular views about disease causation and treatment. The latter seems to focus upon the existence of a unique pathogen, which implies that there is, or will be, a single cure. It is, in some senses, of great interest that these views coexist with an equally widespread view that stress is a major contributor to many human ills. Yet in an act of cultural compartmentalization, many who hold to the view of singularity deny the possible contributions of stress to these symptoms and discomfort in one aspect of life while affirming it in others.

The Vietnam conflict and its postwar developments led to massive numbers of men asserting that they suffer from posttraumatic stress disorder and/or physical and psychophysiological symptoms presumed to be a result of Agent Orange exposure. This cultural perception may have precipitated Gulf War illnesses’ presumed singularity. Such singular attributions were not a major phenomenon after World War II, our bloodiest and most extensive conflict in this century. Attribution of postwar symptoms to toxic gases after World War I (“gas
neurosis”) was solidly based in the real and widespread use of such agents by both the Central Powers and the Allies.

Postcombat casualties after Vietnam were perceived by many as victims of certain singular characteristics of that war. This model, presenting a given war as having unique characteristics capable of causing specific illnesses, dominated much of the dialogue and debate over the consequences of Vietnam for our troops. We shall see that Vietnam, like the Gulf War, was certainly not singular in terms of the causes that generated either wartime or postwar psychological or psychophysiological casualties. I assert that the image of unique causation and casualty type is not empirically grounded, but is in good part a function of various sociocultural, ideological, and politically inspired views of the war. I see Vietnam as part of the long continuum of the human damage done by war, and I see the post-Vietnam experience as a source for the kind of model of the singular event often invoked by many to explain the symptoms presented by some returnees from the Gulf.

Thus, to understand factors in Operations Desert Shield and Storm and its aftermath that contributed to the creation of the painful symptoms of Gulf War illnesses, it is important to move beyond the assumed singularity of events in the Gulf. We must look at historical examples that can help elucidate the patterns of response to participation in war and dangerous and stressful deployments. While deployment to combat is not the sole cause of such patterns of response, they are seen in civil society following exposure to trauma and significantly stressful life situations such as bereavement. However, this report shall stay with the central theme of combat and deployment.

It becomes apparent as the record is studied that significant elements contributing to these illnesses are those that we, today, classify as stress and stress response. But such classification is a simplification and an abstraction. The illnesses are the result of the interactions of elements in a multifactorial matrix. This matrix includes the following as major factors, among others:

- the biological substrate and unique psychological history of the individual
- the experiences and events of the campaign
- the cultural and cognitive screen through which these events are interpreted
- belief systems about causality and the dominant etiological paradigms provided by the medical system of the time
- beliefs about biological and psychological outcome processes.
These are the factors I focus on throughout this report. An overarching concern is the role played by cultural differences among the surveyed historical periods in shaping the illness responses that are perceived. Here again I must emphasize that illness is used in the technical sense developed in medical sociology and medical anthropology: “subjective experiences of physical or emotional changes and confirmation of these changes by other people . . . both largely determined by socio-cultural factors” (Helman, 1994, p. 110).