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Operational stress injuries in the new asymmetrical battle spaces: Is it possible that there are new unidentifiable stressors in today's conflicts?

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ABSTRACT

Canada has been on the international scene for years, sending troops all over the world. The world is always changing, and soldiers have evolved from conducting conventional warfare, to peacemaking, peacekeeping, security enforcing, and asymmetric warfare. The Canadian Forces (CF) is sending troops to areas where the climate is economically and politically volatile, and where missions can change instantly.

Furthermore, Afghanistan, the area in which CF personnel are presently deployed can be considered one of the hottest spots for casualties and death. The political and economical issues of the country make it an unstable location for predictability.

The presence of terrorists in Afghanistan brings a different dynamic to the operational equation, and makes it a place where risks have to be evaluated, planned and executed with the precision of a master-mind. The Commander, at the operational level of command, needs to rely on medical health services to be able to deliver the proper health care support to the troops on the ground. With adequate preparation and planning, by the commander and the task force medical surgeon, it is possible to minimize health risks to deployed soldiers. However, the possibilities for physical and/or mental casualties are quite high.

This paper will try to address the issues related to stress and stressors that soldiers can face, and probably are facing, during these types of missions. I will use Iraq and Afghanistan as examples of countries in which these problems may be encountered.

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INTRODUCTION

In the last few years, many operations on peacekeeping, peacemaking and counter terrorism have been initiated and carried out. Many soldiers have participated in all of these deployments and some on more then one occasion. During, and after these missions numerous soldiers have been hurt physically and/or mentally. The purpose of this paper is to explore Operational Stress Injury at the operational level. I will focus not on the end of the spectrum of the stress injury that is PTSD but on the aspect, that precedes it.

First, I will reveal some points about PTSD for completeness of the topics. Many studies and much research have been conducted on PTSD, its diagnosis and treatment modalities. Extensive information is available from the civilian sector with regard to incidents, atrocities and natural disasters. Most of these studies included a limited number of people with PTSD and are reported after the fact. Little research is done during an actual event. PTSD is not foreign in a military context, as studies and retrospective studies are being done in with regard to PTSD, and evaluated regularly. Having been diagnosed, PTSD is quantifiable in the military context. Most of the time, members who do not function in the CF organization because of PTSD are most of the time released and the department of Veteran Affairs (DVA) looks after them. With the transfer of a soldier's file from the CF to DVA, it is possible to collect data from the DVA in direct correlation to PTSD. The numerical data given by their office is primary

generic, because it represents only the final diagnosis, rather than the timing and why this has occurred to the member. Confidentiality is the justification given. I mention this information because even if a lot is written about PTSD, little is known about how many cases are directly related to deployments in the military. Sometimes, signs of PTSD can appear years after deployment, the member having continued his or her career during these undiagnosed years. During that time, possible posting, redeployment and change in military occupation could have happened. Now, following diagnosis, should the question be asked if the symptoms are a result of the previous deployment? The difficulty will be trying to determine which of the multiple factors, including family, postings, and redeployment, actually caused the symptoms? Just to mention a few. It is interesting to note that the commander is responsible for his troops before, during and after deployment.

Situational Awareness:

The topic of operational stress injuries is such that it is an issue at all levels of command, strategic, operational and tactical. Since the stress injuries affect the soldiers, I will go back and forth between tactical, operational and sometime strategic levels to link the situational awareness and its implications towards the operational stress injury. I will try to focus on the operational level. Furthermore, I will be talking about asymmetric warfare but will focus on terrorism, one element or sub-component of the asymmetric warfare.

Thesis: I will try to demonstrate in a specific context, particularly Iraq and Afghanistan, the effect of asymmetrical battle spaces on the soldier, demonstrating that the inclusion of

terrorists may lead to additional stressors, leading the soldiers toward an operational stress injury.

Asymmetric warfare

Asymmetric warfare by definition is:

> military term describing warfare in which the two belligerents are mismatched in their military capabilities or their accustomed methods of engagement. In such a situation the militarily disadvantaged power must press its special advantages or effectively exploit its enemy's particular weaknesses if they are to have any hope of prevailing.[1]

Asymmetric warfare is defined as well by different concepts in the literature and has been around since the beginning of time[2]. Prominent ancient examples include:

> Spartan attack on a coalition of Athens, Corinth, and Argos, in 394 B.C.; the Hungarian attack on Turkey in 1747; several wars initiated by weaker sates against their more powerful adversaries in the post-World War II period; the Chinese intervention in Korea (1950); the Pakistani offensive in Kashmir (1965), and the Israeli attack on the Arab States (1967), to name just a few.[3].

Asymmetric warfare is also synonymous with fourth generation warfare.[4] Throughout the 20th century, in small scale conflicts, armies relied increasingly on the tactics of the guerilla, spy, saboteur, provocateur, double agent and even terrorist and assassin. Obviously, these peoples were not perceived as real soldiers, and were subject to a different justice, when compared with Armed Forces personnel who were caught in the

[1] http://en.wikipedia.org/wiki/Asymmetric_warfare#Pre-20th_century_asymmetric_warfare
[2] Miles Franklin B. Asymmetric Warfare: An historical Perspective. U.S. Army war college, Carlisle Barracks, PA 17013. Strategy Research Project. 17 March 1999.
[3] Paul, T.V. Asymmetric conflict: war initiation by weaker power. Cambridge, University Press. 3-4
[4] Lind William S. Understanding fourth generation war. Military Review. Sept-Oct 2004. 12-16

act. In the law of arm conflict and rule of war, classical rules in particular, asymmetrical warfare is completely moral in itself, all other rules of war being obeyed.

September 11th

The aftermath of the September 11th attack on the World Trade Center and the Pentagon generated a new type of war, which is against terrorism. The war on terrorism is being conducted not only against the terrorists themselves, but also the states that have supported and continue to support their operations. The principal threat is international jihadism, which is associated with Wahabbism. Al-Qaeda and its jihadists have weakened as a result of counter-terrorism action since 9/11. Afghanistan and Iraq are the primary target countries and at the outset, President George W. Bush stated, that it would not be "like the war against Iraq a decade ago, with a decisive liberation of territory and a swift conclusion" and he also warned that " Americans should not expect one battle, but a lengthy campaign, unlike any other we have ever seen"[5]. Canada has supported the global campaign against terrorists, and those who support their actions, by sending troops to Afghanistan.

Canada was part of the coalition in the war against terrorists in Afghanistan, even before the Bonn Agreement was signed. The Bonn Agreement[6] set out a schematic roadmap and timetable for establishing peace and security, reconstructing the country, reestablishing some key institutions, and protecting human rights. Though it was not a comprehensive peace agreement, it represented the best possible chance for establishing peace, security, and protection of human rights. One of the main problems of the Bonn

[5]d. Thl

Agreement is that the entire infrastructure needed to support a proper government had been destroyed and would take years to rebuild. Another issue resulting from the agreement is that the Kabul administration is unable to pay the salaries of commanders and soldiers. Given the nature of the treaty, it will be difficult, if not impossible to exercise and execute command and control over the various forces around Afghanistan or to force their compliance with the Bonn Agreement. [7] The drug lords with all their weapons and armaments must not be underestimated in light of the treaty.

Terrorist and Terrorism

First, let us consider terrorism. Stout[8], in his book: The Psychology of Terrorism, differentiates between state terrorism and non-state terrorism. He mentions: "the word terror, which refers to political violence, goes back only to the French revolution of the 1790s. The resistance within France and the first violence to be called terrorism had the power of the state behind it."[9] Some examples in his book include: Stalin, Mao and Hitler. Killings by non-state terrorism are minuscule in number, as the state does not support them. In his view, state terrorism is by far a greater danger.

Today, terrorism is understood as meaning non-state terrorism or freedom fighting. Stout's book focuses on terrorists without the power of the state and how they become capable of political violence, which includes violence against noncombatants. He goes into great depth about the reasons some would adopt this type of violence, and for what purpose. The main reasons are numerous but the trend is towards a psychology

[7] HRW Wold Report 2001. Afghanistan's Bonn agreement one Year Later. A Catalog of Missed Opportunities December 5 2002. 34th floor New York.
[8] Stout, Chris E. The psychology of terrorism. Praeger: Westport, 2002
[9] Ibid., 8. Stout

of groups, in which the link to a larger group causes small group dynamics, a mental state that can cause individuals to sacrifice themselves. The other trend is toward group dynamics being less important than the cause, which again, may create an environment in which individuals sacrifice themselves for the cause. The strategy of terrorism is one of material and political damage to the enemy. The ways in which terrorists hope to elicit a violent response are those that will assist them in mobilizing their own people. "A terrorist group is the apex of a pyramid of supporters and sympathizers."[10]

Stout goes to great lengths to explain that groups of individuals (Nazis, and his Jewish, Islamic, Christian … ethnic cleansing) have committed acts that one person alone could not have initiated because of a lack of support and understanding. Stout takes the time to link the dynamics of group synergy, mentioning the religious distortion of the interpretation of religions causes such as the jihad.

Another author, Ana Serafim, in her article, talks about terrorism as a cultural phenomenon. She mentions that "what people think, how they think, and the way they react to events are all influenced by culture. Even terrorist are products of culture."[11] She mentions that Western society is politically oriented, and to assume that if the proper political context is addressed, the phenomenon of terrorism will fade away. She says that when the roots of terrorism are non-political or economic, even if the political surroundings are changing, the net result will not change. She suggests that theology should become a topic in international diplomacy, rather than a security issue. She mentions and explains the objectives of terrorism in different cultures, which in the eyes

[10] Ibid., 8. Stout
[11] Ana Serafin. Terrorism-a cultural phenomenon? The quarterly journal. Pg 61-74. Note: Ana is Senior adviser, Ministry of National Defense, Romania; member of combating terrorism WG, pfp Consortium.

of terrorism could be, Dar al Islam/ Dar al Harb, Ummah, The great Caliphate, and Jihad (in other words religious). I mention these ideologies to express the complexity of understanding the phenomena in depth, but will not develop them further as they are not the purpose of this paper.

Asymmetric Warfare and the Terrorist

A classic example of asymmetrical warfare occurred between the U.S. and Afghanistan. U.S. forces were using advanced technology with the Special Forces to target specific locations, thus giving them total advantage, as the Taliban did not have the capability to counter attack. The result was the dismantling of the Taliban and al Qaeda forces, and their dispersion into the mountains of Afghanistan and Pakistan, thereby removing the US advantage. Right now, in Afghanistan al Qaeda is fighting in guerrilla style, like the Iraqis, changing operational tactics at will to attack each new target. In addition, sporadic threats to the operational structure of campaigns, and to strategic targets cause some concern. By attacking randomly, the enemy attempts to avoid U.S. operational advantage, and by exploiting U.S. and Canadian weaknesses or blind spots, the terrorist, as part of the opponent is able to inflict harm at will.[12] Terrorism is an integral part of the conflict. The unconventional threat executed by fanatics willing to commit suicide for their cause makes traditional force-on-force operations ineffective. This type of opponent (a terrorist) did not sign the Geneva Convention.[13] "The front lines, as we delineate them stretch from the streets of Kabul to the rail lines of Madrid, to

[12] Montgomery C. Meigs. Unorthodox thoughts about asymmetric warfare. Parameters, US army war college quarterly-Summer 2003,1-14

[13] Salisbury David. Asymmetric warfare and the Geneva Conventions: Do we need a new law of armed conflict in the age of terrorism? Toronto: Canadian Forces College National Security Studies Course paper. 2002

our own Canadian cities."[14] Terrorists will not limit themselves to one area of operation. However, I will limit asymmetric warfare to the examples found in Afghanistan and Iraq, for the purpose of this paper.

Operational Commanders

Operational level commanders must be prepared to deal with warfare in which there are few if any rules and ethics. Asymmetrical threats are countless and result in ambushes and assassinations. Casualties and mass casualties sometimes involving civilians and military personnel are the result of such action. Operational level commanders must develop strategies and plans to address terrorist tactics effectively, since there are no rules, and state military has recently been unsuccessful in defeating non-state enemy. The heart of the problem is a need to predict with a fair degree of accuracy, the new command and control of the opponent. Al Qaeda forces are patient, and able to reorganize using current technology for their next strike. As their methods are unconventional, it is imperative to think differently and to use different assets and organizations to outmaneuver them.

Health Services Supporting the Operational Planning Process

Task force headquarters should be organized in preparation for asymmetrical warfare[15]. At this point in time, we do not have a specific Canadian joint task force doctrine for asymmetric warfare. With Afghanistan or Iraq as our examples, we have to assume that because of the terrorist presence, which increases the risk of attack, casualties both physical and/or psychological are a likelihood. The commander is ultimately responsible for the health of his troops.

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[14] Ibid., 8. 5.
[15] United States, Joint Task Force Planning Guidance and Procedure. Joint Publication 5-00.2, 13 January 1999.

> The authority vested in Commanding Officers to override a medical officer's recommendation is a concern raised by many in the field. Similarly, concern has been expressed to us that medical officers do not always consider the unit's responsibilities when they provide their recommendation to the Commanding Officer. This potential conflict is disconcerting to CF members as a medical professional's recommendation to facilitate healing can be openly disregarded; yet the Canadian Forces is not an accommodating employer if an injury does not heal. Accountabilities need to be defined in this area and a better balance maintained.[16]

At the operational level, the task force surgeon and Health Service Support (HSS) staff at the TFHQ carries this out on behalf of the Task Force Commander (TFC) (figure below). Important to note that in a joint operation, the HSS structure is designated, formed and deployed to provide operational and tactical level HSS to all participating elements. The decision to deploy Role 3 treatment capabilities is made by the CDS following consultation with ECSs, Group principals, the JTFC and Commander CF H Svcs Gp. Once deployed the mission specific composition HSS element is directed by the JTFC.

> Based on the best lessons learned over many years, CF doctrine should be adhered to both to protect our soldiers and to ensure the achievement of the mission. When doctrine is deviated from, it must be with due awareness of the impact it will have. The level of command that makes the conscious decision to deviate from established doctrine must be prepared to accept accountability for that decision.[17]

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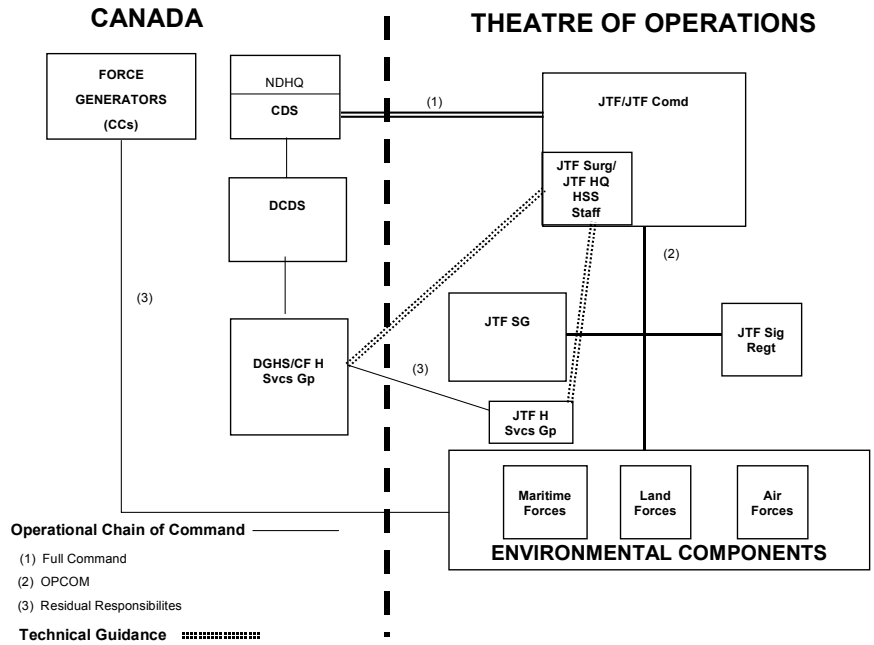
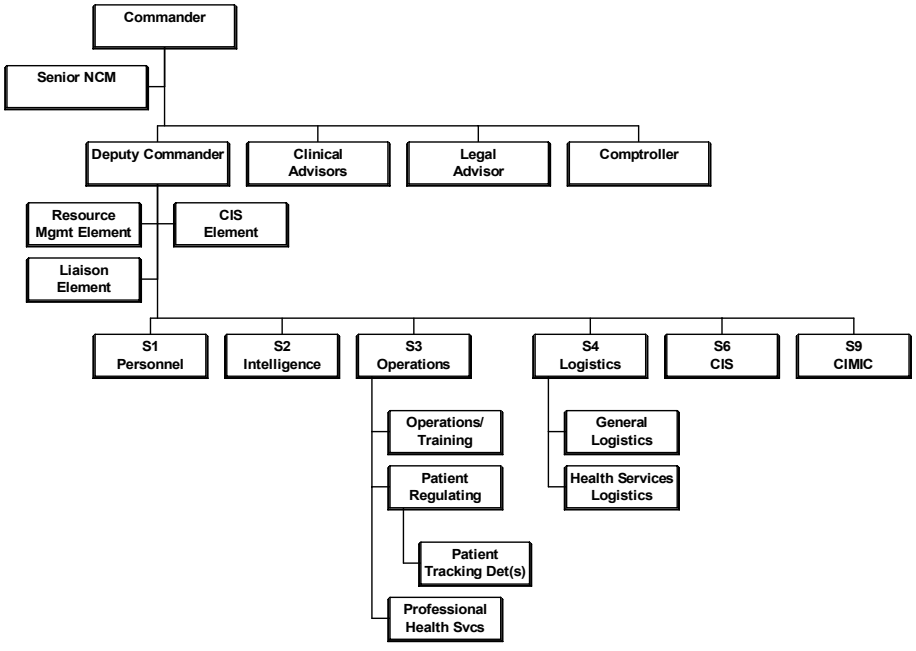
[16] Canada. Department of National Defense. 18 Oct 2005. Board of inquiry-Croatia. Http://www.forces.gc.ca/bio/engraph

[17] Ibid., 16

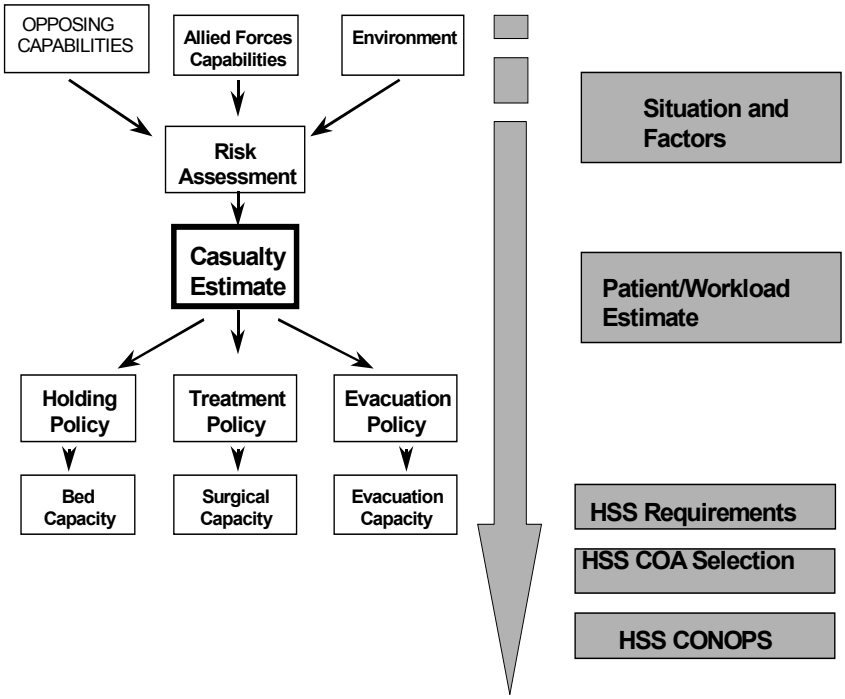




Pictures of conceptual task force Composite Health Services Group Headquarters.

The planning for the health of soldiers should start as early as possible. The nature of the operations in relation to HSS planning is purposely built for each operation. The most essential step for the HSS commander is to have a clear understanding of the mission. The process of estimation is central to the formulation of the concept of operations (CONOPS). HSS planners should be deployed on site for reconnaissance missions, to evaluate HSS capabilities and concerns in the AO and to gather all the intelligence from the AO. In Allied and Host Nation support, this may require a mutual support and assistance among the CF, allied military, Host Nation authorities, and agencies prior to deployment.

The estimate of potential patients casualties is to be calculated for the purpose of collection, examination, treatment and evacuation (see figure below). Medical task force officers will be involved with their personnel to determine possible threats to the soldiers on the ground. The staff conducts detailed planning of operations following promulgation of the CONOPS. All operational plans (OPLAN) for CF operations include an HSS Annex (normally annex K).(ref 5-4)



Development of the Health Services Support Concept

Once the potential personnel casualty rates have been agreed upon within the commander's staff, using computer software tools available to translate these into casualty and patient estimates and required HSS resources (numbers of beds, surgical teams, blood units, etc.) the planning is forwarded to the operational commander for his information.

Patient Repatriation

Evacuation of patients to Canada, with the coordination of strategic/national level evacuation resources and determination, coordination of destination of treatment facilities capable of dealing with the definite care of the patient, need to be identify prior to deployment. All the logistics involved in the process are done at the operational level for the tactical level, and are sent to the strategic level for pre-approval. If the patients are

sent to another hospital for expediency, all has to be planned prior to staging for universality of services according to the Canadian standard of health. "When allied or Host Nation treatment facilities are supporting CF elements, a CFCS liaison team must be attached to the supporting treatment facility to track Canadian patients until they re-enter the Canadian system." [18] "As an outcome of legislation, policy and military efficiency, CF members have their health protected, promoted and restored in accordance with the principals expressed in the Canada Health Act."[19]

Intelligence

Medical intelligence at the strategic, operational and tactical level is a primal aspect of the well-being of CF soldiers. It is important to distinguish between health information and medical intelligence. Information is the raw material provided by collectors, which is subject to thorough processing resulting in medical intelligence. Medical intelligence assesses health threats and risks, HSS estimates, prophylactic measures, strategic intelligence estimates, and analysis of opposing forces capabilities and vulnerabilities. Medical intelligence is divided in two areas: General medical intelligence and scientific and technical intelligence.

General medical intelligence uses the collection and processing of information on environmental factors, military and civilian HS capabilities and epidemiologic concerning the incidence, distribution and control of diseases. Scientific and technical intelligence use the collection and processing of foreign scientific and technical information. The information can be basic in nature or applied and includes the areas of

[18] Canada. Department of National Defense. Publication. B-BJ-005-410/FP-000 (study draft 3)
[19] Ibid., 18. B-GJ-005-410/FP-000 (study draft 3)

biological sciences, biomedical research and bioengineering.[20] It is important to note here that the CF do not request intelligence on NATO nations. Information about NATO nations is not an intelligence issue or function.

Mental Health

Mental health is part of the operation planning process and sustainment of forces, and is an essential component of operational effectiveness. CF leadership has an important role to play in promotion, maintenance and recovery of mental fitness among CF members.

> There is a far too prevalent attitude in the field that there is no substance to an individual's medical problem unless there are visible symptoms of injury, like a broken leg. This is inhibiting people from seeking help from within their units as a first recourse. Long-term education and positive leadership examples are essential to reduce this problem. For example, Lieutenant-General Dallaire's willingness to discuss his PTSD openly has had an excellent effect on that subject. However, the Canadian Forces, and indeed Canadians in general, have a long way to go toward acknowledging that it is acceptable to admit psychological injuries.[21]

Operational support is required throughout all phases of an operation.

The types of mental support required for the operations are:

Preparation and deployment: The planning and analysis of mental health environment and threats; reconnaissance and survey; education; briefing and conditioning of deploying personnel; rear parties are all part of the preparation and deployment.

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[20] Ibid., 18. B-GJ-005-410/FP-000 (study draft 3)

[21] Canada. Department of National Defense. Board of Inquiry-Croatia. 18 October 2005. http://www.forced.gc.ca/hr/boi/engraph

Employment: The monitoring of deployed members and conditions, promotion and prevention, counseling, treatment, pre-repatriation conditioning and briefing, and support to rear parties are all aspects involved while deployed that need to be weighed for priorities.

Redeployment and post-redeployment: The education and briefing, surveillance, assessment, counseling and treatment of soldiers upon their return are essential for their well-being, and to maintain a presence in the event that signs and symptoms develop later on.

Mental health personnel are assigned early to conduct pre-deployment training and to develop inter-personnel relationships, which are key elements in bringing soldiers to share problems and concerns with health-care providers.

Combat operational stress reaction is a:

> Term that encompasses an array of reversible effects caused by the stresses of operations, and refers to the temporary psychological upset causing an inability to function normally (including the ability to engage the enemy and survive). It encompasses the terms Battle Fatigue, Battle Shock, and Critical Incident Stress as well as older terms such as Shell Shock and Combat Exhaustion.[22]

To address a combat operational stress reaction after an incident, for example, soldiers who develop combat operational stress reactions due to mass casualties from a terrorist suicide bomber, the first priority after all the casualties are taken care of and sent to the proper medical facilities, it to ensure that the remainder of the troops involved receive treatment from the ready responders, consisting of the supervisor within the parent unit or formation outside the HSS system. The treatment should consist of adequate sleep, food,

[22] Canada. Department of National Defense. Publication. B-Gj-005-410/FP-000 (study draft 3)

a shower, clean clothes, and opportunity for emotional/mental release with an active empathic listener. Evidence has showed that, for most of the soldiers, this is enough to bring them back to a psychological level of proper rationalization. If the treatment is refractory, meaning that it did not help the soldier, then the soldier should see medical-care personnel normally involving psychiatric nurses, stress management trained medical technicians or a psychologist at a Role 3 treatment facility. If the treatment is still refractory after 72 hours then the soldier should be evacuated to a Role 4 treatment facility, normally in Canada, with a priority three, meaning routine evacuation.

Stress and Stressors During Conflict

The conflict in which Canada is presently involved in Afghanistan has a high risk for casualties because of the constant threat from terrorists. This new source of stress for the soldier has a great impact in his mindset and mental health. Soldiers are more at ease when they know and can see their enemy. The fact that any moment terrorist attack could happen brings different stressors, physically and mentally, to the soldier. Incidents, such as those involving mass casualties involving civilians and military personnel or a human bomb could, for some soldiers, be detrimental and a great cause of stressors. The fact that these stressors are possible should be taken into consideration by the operational HSS commander. These stressors at the tactical level have the potential to impact on all levels of operation if not taken seriously. At the tactical level, some of these circumstances could be perceived as either positive or negative feelings. Positive major life events tend to have either trivially stressful effects, or actual beneficial effects,[23] but

[23] Stewart A.J, Solol M., Healy J.M & Chester, N.L. Longitudinal studies of psychological consequences of life changes in children and adults. Journal of Personality and Social Psychology, 50, 1986, 143-151

major life events that are negative can be stressful and lead to medical problems.[24] Most of the time, war brings a more negative dimension, because some soldiers see and experience atrocities, and have to live in harsh conditions. For example between "16% and 19% of the veterans who served during Operation Desert Storm, had symptoms of post-traumatic stress disorder (PTSD) such as recurrent memories, nightmares, restricted emotions, sleep disturbance and irritability." [25]

> Stressors are events that threaten or challenge people. They are the source of stress. Stress responses are psychological, physiological and behavioral reactions to stress.[26]

Mental and Physical Stressors

Mental stressor:

> Is information about a given threat or demand, but this information results in only indirect physical impact on the body. Instead, its primary effect is to place demands on and evoke reactions from the perceptual, cognitive and /or emotional systems of the brain.

Physical stressor:

> Is one that has a direct, potentially harmful effect on the body. These stressors may be external environmental conditions such as temperature or the internal physiologic demands required by or placed upon the human body such

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[24] Thoits, P.A. Dimensions of life events that influence psychological distress: an evaluation and synthesis of literature. In H.B. Kaplan (Ed.) Psychological stress: trends in theory and research 1983, 33-103. New York, NY: Academic Press.
[25] Sutker P.B., Uddo M., Brailey K., Allain A.N. Jr. War-Zone trauma and stress-related symptoms in Operation desert Shield/Storm ODS returnees. Journal of Social Issues, 1993. 49, 33-49
[26] Stress Less®. http://www.stressless.com/stressinfo2.cfm

as the need for hydration, or an immune response to a viral infection.[27]

The following table provides some examples for the two types of mental and physical stressors. Physical stressors may cause mental stressors as a result of discomfort, distraction, and threat of harm, in addition to when they directly impair brain function. Mental stressors may lead to adaptive or maladaptive behaviors that decrease or increase the exposure to physical stressors.[28]

Physical Stressors	Mental Stressors
Environmental	**Cognitive**
Heat, Cold, wetness, dust Vibration, noise, blast Noxious odors: fumes, poison, chemicals Directed-energy weapons/devices Ionizing radiation Infectious agents Physical work Poor visibility: Bright lights, darkness, haze Difficult or arduous terrain High altitude	Information (too much or too little) Sensory overload or deprivation Ambiguity, uncertainty, unpredictability Time Pressure or waiting Difficult decision (e.g. rules of engagement) Organizational dynamics & changes Hard choices versus no choices Recognition or impaired functioning Working beyond skill level \ Previous failures
Physiological	**Emotional**
Sleep deprivation Dehydration Malnutrition Poor hygiene Muscular and aerobic fatigue Overuse or under use of muscles Impaired immune system Illness or injury Sexual frustration Substance use (smoking. Caffeine, alcohol) Obesity Poor physical condition	Being new in Unit, isolated, lonely Fear and anxiety-producing threats (of death, injury, failure, loss) Grief-producing losses (bereavement) Resentment, anger and rage producing frustration and guilt Inactivity producing boredom Conflicting/divided motives and loyalties Spiritual confrontation or temptation Causing loss of faith Interpersonal conflict (unit, buddy) Home front worries, homesickness Loss of privacy Victimization/ harassment Exposure to combat / dead bodies Having to kill

[27] United States, Doctrine for Health Services Support in Joint Operation. FM 4-02.51 (Final Draft).
[28] Ibid., 27. FM 4-02.51 (Final Draft)

Stress responses, on the other hand, are products of the stressors and are divided into three categories: psychological, physiological and behavioral responses.[29]

Psychological [30]	Physiological [31]	Behavioral [32]
Cognitive Concentration problems Indecision Forgetfulness Sensitivity to criticism Self-critical thoughts Rigid attitudes Emotional Nervousness, Panic, Extreme anxiety Depression, Hallucination Tension, Irritability Anger, Hostility Sadness, Guilt Shame Moodiness Loneliness Jealousy	Increase in heart rate Increase blood pressure Rapid or irregular breathing Muscle tension Dilated pupils Sweating ‘ Dry mouth Increased blood sugar levels	Stained facial expressions A shaky voice Tremors or spasms Jumpiness Accident proneness Difficulty sleeping Overeating or loss of appetite

The stress behavioral is the area in which the range of reactions is from adaptive to maladaptive. The table below from the US military FM 8-51 is a representation of stress behaviors in combat and other operations. On some of these behaviors, leaders can and do have a great impact on the soldier and in fact can change unfavorable outcomes to favorable ones.

To further explain these behaviors, some authors have used the adrenalin response and explained in depth the physiochemical relationship between stress and stressors. Nonetheless, it is the leadership’s responsibility to use these adrenaline rushes constructively and to control the reaction of his or her soldiers.[33]

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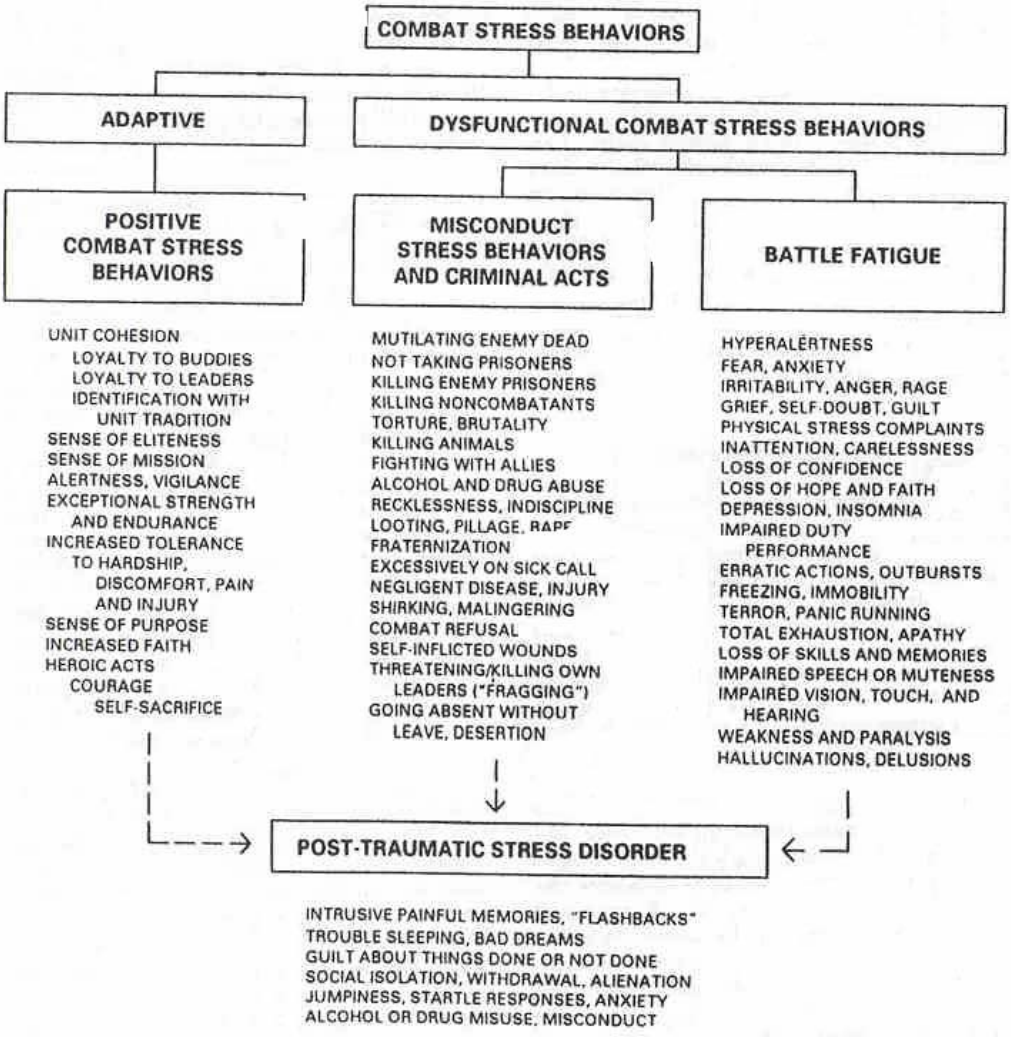
[29] Stress Less. ® http:// www.stressless.com/stressinfo2.cfm
[30] Bernstein, D.A & al. CD 1997. Psychology (4th edition) Boston, MA: Houghton Mifflin
[31] Ibid., 30.Bernstein
[32] Powel T. Free yourself from harmful stress. New York, NY:D.K. Publishing. 1997
[33] Canada. Army Lessons Learned Center. Stress injury and operational deployments. Vol. 10 no 1. February 2004.

Combat Stress Behaviors



Leadership

The commander, at the joint task force headquarters, looks at the ten principles of war[34] and applies them at the OPP. Depending on the circumstances; he has the choice of using all of them or adhering to only one at the expense of the others. I will elaborate only on the maintenance of morale in relation to stressors.

Maintenance of morale is vitally important, as it impacts on the sustainability of the operation. Leadership, cohesion, and the will to win are prime motivators for the morale of the troops. The soldiers' health, which should not be taken lightly, is another factor governing the morale of the troops at all ranks. When soldiers are wounded, physically and/or psychologically, they are taken care of by a medical team but the leadership has the responsibility for creating a proper setting in which to foster a rapid recovery. The earlier the intervention, if needed the better the outcome.

A great example is the Board of Inquiry-Croatia report CF Operations in the Balkans 1990-1991. The medical officers and the commanding officers mentioned that the surgical support available was inadequate for the mission. Patients were too far from the facility to be seen for surgery in a timely fashion. As the soldiers were in a volatile environment, the situation created undue stress on them prompting the question "What if it happens to me next?" that all soldiers have in the back of their minds when a mission is in a volatile area. Again, the concern is planning and leadership. The planning process has to remove the 'What if?' thought from the minds of the soldiers by demonstrating

[34] Canada. Department of National Defense. CF Operational planning process. Joint Doctrine Manual. B-GJ-005/FP-000 pg 1-6 (note: the ten principles of war are the selection and maintenance of the aim, maintenance of moral, offensive action, surprise, security, concentration of force, economy of effort, flexibility, co-operation and administration.)

that they have back up, and that the medical personnel can take care of them. " The Board of inquiry recommended that advanced surgical teams be assigned in high risk theatres of operation whenever a coalition force fails to meet our standards of Health Services Support."[35] Canada is presently using this scenario in Afghanistan. The role 3 presently deployed, is not at full scale but will soon be at full strength.

Another issue concerning morale is determining exactly what constitutes success at the operational and tactical levels. In these types of conflicts, "the key question is, if there is an apparent lack of success does it mean that there was a lack of leadership? Especially in intricate political situations in which short and medium-term objectives are unstable and long term objectives seem out of reach."[36] The leaders have to be aware contextually, politically, socio-logically, economically and conceptually, of the environment[37]. The prompt passage of information as a counter-measure to stress has to be emphasized and implemented at all levels of operation.

Another dimension that is worth mentioning is expressed in the Canadian International Policy statement, which states that:

> "the three-block war will bring to our soldiers, sailors and air personnel an increasing demand on them because they will operate in environments where the spectrum of conflicts are in gray areas, where there are no specific delineation between all the aspects of conflict. These situations are unpredictable, and in no time a humanitarian mission can, turn into a full-scale combat operation, as the opponents are always present. The policy statement mentioned that they will remain combat capable in order to deter aggression defend themselves and civilian

[35] Canada. Department of National Defense. Board of Inquiry Croatia. CF Operations in the Balkans. 1991-1995. http://www.forces.gc.ca/hr/boi/engraph/sustainment_e.asp
[36] Ouellet Eric. Low intensity conflicts and military leadership: The Canadian experience. Low Intensity Conflict & law Enforcement, Vol. 10, No 3 (Autumn 2001) pp 63-88 Published by Frank Cass, London
[37] Canada. Department of National Defense. Leadership in the Canadian Forces: conceptual foundations. Publish under the auspices of the Chief of the Defense Staff by the Canadian Defense Academy, 2005, 120-126

> populations against conventional and **asymmetric attacks,** and **fight and defeat** opposing force with the ultimate goal of restoring peace and stability".[38]

It is interesting to note the mention of opposing force and fighting and defeating the enemy, but how does one recognize the enemy if they are imbedded in the population. The terrorist can use suicide-bombing techniques, walk to the soldiers and detonate themselves. Such actions are often fatal or at least a significant stressor or initiator of operational stress injury. These events can seriously affect morale, if not considered and contingency plans not formulated. Terrorists pay no regard to the Geneva Convention, and will not hesitate to attack hospitals or vehicles bearing the Red Cross sign[39].

Unit cohesion is the binding force that keeps soldiers together and performing the mission in spite of danger and death. This needs to be achieved at the horizontal level among peers and the vertical level between leaders and subordinates. Personal trust, loyalty and cohesiveness are primordial and must be fostered at the leadership level.

Training

Realistic training is of great value. Because we are dealing with terrorist, a different segment of the world, we do not know how to recognize facial expression and what they actually mean in our mental framework of reference. In this regard, this extra stressor is worth mentioning and development opportunities should be available to the soldiers to enable them to read and to determine the intentions of the 'locals'. Furthermore, as risk management is paramount to the success of any operation[40] realistic

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[38] Canada. Department of National Defense. Canada International Policy Statement. A role of Pride and Influence in the World. 26-27.

[39] Salisbury David. Asymmetric warfare and the Geneva conventions: do we need a law of armed conflict in the age of terrorism? Toronto: Canadian Forces College National Security Studies Course Paper, 2002. NSSC 4/ CESN 4

[40] Canada. Department of National Defense. Risk management for CF operations. Joint doctrine manual. B-GJ-005-502/FP-000. 2002-11-06

training should be done prior to deployment. "Units that have trained together do better, both physically and psychologically. [41]

Pre-deployment training is critical in making sure everyone understands the aim and objectives, thus, avoiding the soldiers' confusion and distrust. Units that have been tasked do not normally have enough personnel to deploy, for many reasons. Op Tempo demands that personnel be taken from other units or be augmented by reservists to take care of this requirement shortfall. Unfortunately, the time is always compressed before the CF have to deploy[42] therefore creating ad hoc units with little possibility of unit cohesion. Group cohesion is sometimes difficult to establish, and is a leadership challenge that needs to be addressed effectively. As well, the type of contract for reservists before deploying can be a stress factor to them, and should be addressed at the strategic level. The fact that reservists are in a class C contract just in time for departure could disrupt pre-deployment preparations. Another consideration for the leadership is the realizations that reservists arrive in the equation with their civilian thought processes and perspectives of the world, which may differ greatly from those of the group. The differences could be beneficial or detrimental depending on the reason they chose to be deployed, which is not always in line with military ethos.

Medical training of soldiers prior to deployment is essential, and critical for the mission[43]. The medical aspect is looked at before soldiers deploy but because of the lack of time, not much is done with regard to coping mechanisms for OSI in the area of

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[41] Sherer R.A. The psychological consequences of war. Psychiatric times. August 2003.Vol.XX, no.8.
[42] Director human resources research and evaluation. Validation of a model to predict soldier attitudes and behaviors during operation deployments: An Exploratory Analysis. Sponsor Research Report 2002-12. Nov 2002.
[43] Canada. Department of National Defense. Medical doctrine. B-GJ-005-410/FP-000 (Study Draft 3)

stress.[44] There is usually a lack of time, prior to deployment for training the soldiers for resiliency[45], (commitment, control and challenge), and pre-deployment format and tempo do not allow for opportunities to do so. Just before departure is not the ideal time to show pictures of wartime atrocities which may be psychologically detrimental and disruptive of the morale of the soldiers. This compounded with all the other immediate stresses involved in family separation and getting ready for departure is not adequate planning. However, it would be beneficial to give theme coping mechanisms or stress inoculation training before departure. The best way to train the soldier with this format in mind would be at the level of force generation, meaning starting at the recruit level, thus helping them to develop resiliency or hardiness to the emotive anxiety response. It would be beneficial to have training that is more realistic for mass casualties and other medically related issues.

> "Personal hardiness, self-discipline, resourcefulness and the value of optimal training methods do much to counteract the effects of operating in hostile and unhealthy environments. However, there is still an unacceptably high long-term psychological effect of participation in military mission." [46]

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[44] Zamorski M.A. Evaluation of an enhanced post-deployment health screening program for Canadian forces members deployed on operation APOLLO (Afghanistan/SW Asia) preliminary findings and action plan. Post-deployment health section directorate of medical policy Canadian forces medical group. 13 June 2003.

[45] Hanton S. Evans L. and Neil R. Hardiness and the competitive trait anxiety response. University of Wales Institutes. June 2003, Vol. 16, no.2, 167-184

[46] Karney, George. Creamer M. Marshall R & Goyne Anne. Military stress and performance Australian defense force. Melbourne University Press. Australia, Open book Print. 2003, 227

Scientific Studies

Soldiers have to be physically fit, however we often forget to see if they are emotionally fit. In the military, the word 'emotion' is seldom used, and does not match elegantly with what we are trying to accomplish. Maybe the psychological status of soldiers should be looked at more closely, as this is what we have to deal with in any type of asymmetrical warfare involving terrorist' attacks. However, ensuring that personnel are mentally fit, is a difficult task that requires an enormous number of personnel, in order to have a significant impact on each individual. Everyone joins the armed forces with emotional baggage of some sort, and there is certainly no standard to begin with.

> Although well-measured variables, such as intelligence, have been shown to predict success in training and aptitude, no instrument has yet been identified which can accurately assess psychological vulnerability. [47] We should be exploring more in greater depth the leadership and leaders who should be able to have a positive impact on soldiers[48].

Another technique employed following critical incident on the ground, which consists of a form of debriefing done as soon as possible after the incident. The CF perform this debriefing differently than the US. Furthermore, some providers view this procedure as possibly sending a wrong message, that the incident might be more important than it actually appears. It is significant to know that, the CF can do and do

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[47] Jones e., Hyams K.C., Wessley S. Screening for vulnerability to psychological disorders in the military: an historical survey. J Med Screen. 2003;10:40-46

[48] Canada. Department of National Defense. Leadership in the Canadian Forces: conceptual foundation Publish under the auspices of the Chief of the Defense Staff by the Canadian Defense Academy. 2005, 120-126

deal with such critical incidents, but they have to be planned. It is in the initial planning process that stress incident debriefing needs to be taken into consideration to determine the quantity, and sometime to train key player to be debriefers

. In the long run, the OSI might affect, the operational level and its sustainability, if they do not already do so. The Board of Inquiry-Croatia recommended in its summary that we should "cross-train medical officers and padres to be critical incident stress debriefers and train 'peer counselors' at all rank levels."[49] Other researchers reinforce the belief that critical stress incidents should not be conducted, because they could affect the resiliency of personnel in dealing with incidents. The long-term results of conducting a critical incident debriefing does not show a better result for improvement of OSI to the personnel.[50],[51],[52] The other issue at this point is that DND does not have enough personnel trained to do such a debriefing on a large scale.

Conclusion

Stress is cumulative, and long-term exposure to stress causes people to develop physical symptoms. How long is long? Nobody knows, as it varies depending on the intensity and degree to which someone is exposed. Nonetheless, the fact that the situation in Afghanistan is volatile and unpredictable makes it one of the most stressful assignments that the CF has been involved in for a long time.

The threat of terrorism is real, as is operational stress injury. This is a leadership issue and the commander has to consider stress as an aspect of risk and management

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[49]Canada. Department of National Defense. Board of Inquiry – Croatia

[50] Bonanno G.A. Loss, Trauma, and Human Resilience. Have we underestimated the human capacity to thrive after extremely aversive events? American Psychologist. Jan 2004, 20-28

[51] Moran C.C. Individual differences and debriefing effectiveness. The Australasian Journal of Disaster and Trauma Studies. School of social work, University of NSW, Australia. 1-12. http://www.massey.ac.nz/~trauma/issues/1998-1/moran1.htm

[52] Kearney G. Creamer M. Marshall R. Goyne A. Military stress and performance. The Australian defense force experience. Melbourne University Press. Chap 7. 112-122

during his risk assessment[53]. The medical annex needs to take into account the risks inherent in each mission, and create a field hospital capable of supporting the troops abroad. Medical teams have to go back and analyze previous missions in the Canadian context and come up with more valid predictors and effective tools against stress and stressors. The CF needs to be on line with force sustainment and the direct relation to medical treatment of soldiers. The shortage of physicians and specialists in Canada is a further impediment and a hard reality.

The Canadian Armed Forces leaders need to do a better job with regard to OSI, and to support troops before, during, and after deployment. The threat of terrorism is real, as is the intensity of stress that soldiers experience at all ranks. Our most important asset is our people, and we need to demonstrate this. Soldiers should be able to do their jobs confidently, knowing that DND will be there before, during and after the battle.

[53] Canada. Department of National Defense. Leadership in the Canadian Forces: Conceptual foundations. Publish under the auspices of the Chief of the Defense Staff by the Canadian Defense Academy. 2005. 120-126

BIBLIOGRAPHY

Ana Serafin. Terrorism-a cultural phenomenon? The quarterly journal. Pg 61-74. Note: Ana is Senior adviser, Ministry of National Defense, Romania; member of combating terrorism WG, Pfp Consortium.

Archambault P.M. et al. Directorate of Strategic Analysis Policy Planning Division Policy Group. Strategic Assessment 2004. Department of National Defense Canada. 2004, 21

Bernstein, D.A & al. CD 1997. Psychology (4th edition) Boston, MA: Houghton Mifflin

Bonanno G.A. Loss, Trauma, and Human Resilience. Have we underestimated the human capacity to thrive after extremely aversive events? American Psychologist. Jan 2004, 20-28

Canada. Army Lesson Learned Center. Stress Injury and Operational deployments. February 2004. Vol. 10 No 1.

Canada. Department of National Defense. 18 Oct 2005. Board of inquiry-Croatia. Http://www.forces.gc.ca/bio/engraph

Canada. Department of National Defense. Board of Inquiry Croatia. CF Operations in the Balkans. 1991-1995. http://www.forces.gc.ca/hr/boi/engraph/sustainment_e.asp

Canada. Department of National Defense. Canada International Policy Statement. A role of Pride and Influence in the World. 26-27.

Canada. Department of National Defense. CF Operational planning process. Joint Doctrine Manual. B-GJ-005/FP-000 pg 1-6 (note: the ten principles of war are the selection and maintenance of the aim, maintenance of moral, offensive action, surprise, security, concentration of force, economy of effort, flexibility, co-operation and administration.)

Canada. Department of National Defense. Leadership in the Canadian Forces: conceptual foundations. Publish under the auspices of the Chief of the Defense Staff by the Canadian Defense Academy, 2005, 120-126

Canada. Department of National Defense. Medical Doctrine Publication. B-GJ-005-410/FP-000 (Study Draft 3)

Canada. Department of National Defense. Risk management for CF operations. Joint doctrine manual. B-GJ-005-502/FP-000. 2002-11-06
Director human resources research and evaluation. Validation of a model to predict soldier attitudes and behaviors during operation deployments: An Exploratory Analysis. Sponsor Research Report 2002-12. Nov 2002.

Government –Afghan Bonn Agreement. 1-11.
http://www.afghangovernment.com/afghanagreementbonn.htm

Hanton S. Evans L. and Neil R. Hardiness and the competitive trait anxiety response. University of Wales Institutes. June 2003, Vol. 16, no.2, 167-184

HRW Wold Report 2001. Afghanistan's Bonn agreement one Year Later. A Catalog of Missed Opportunities December 5 2002. 34th floor New York.
http://en.wikipedia.org/wiki/Asymmetric_warfare#Pre-20th_century_asymmetric_warfare

Jones e., Hyams K.C., Wessley S. Screening for vulnerability to psychological disorders in the military: an historical survey. J Med Screen. 2003;10:40-46

Karney, George. Creamer M. Marshall R & Goyne Anne. Military stress and performance Australian defense force. Melbourne University Press. Australia, Open book Print. 2003, 227

Kearney G. Creamer M. Marshall R. Goyne A. Military stress and performance. The Australian defense force experience. Melbourne University Press. Chap 7. 112-122

Lind William S. Understanding fourth generation war. Military Review. Sept-Oct 2004. 12-16

Miles Franklin B. Asymmetric Warfare: An historical Perspective. U.S. Army war college, Carlisle Barracks, PA 17013. Strategy Research Project. 17 March 1999.

Montgomery C. Meigs. Unorthodox thoughts about asymmetric warfare. Parameters, US army war college quaterly-Summer 2003,1-14

Moran C.C. Individual differences and debriefing effectiveness. The Australasian Journal of Disaster and Trauma Studies. School of social work, University of NSW, Australia. 1-12. http://www.massey.ac.nz/~trauma/issues/1998-1/moran1.htm

Ouellet Eric. Low intensity conflicts and military leadership: The Canadian experience. Low Intensity Conflict & law Enforcement, Vol. 10, No 3 (Autumn 2001) pp 63-88 Published by Frank Cass, London

Paul, T.V. Asymmetric conflict: war initiation by weaker power. Cambridge, University Press. 3-4

Powel T. Free yourself from harmful stress. New York, NY:D.K. Publishing. 1997
Salisbury David. Asymmetric warfare and the Geneva Conventions: Do we need a new law of armed conflict in the age of terrorism? Toronto: Canadian Forces College National Security Studies Course paper. 2002

Sherer R.A. The psychological consequences of war. Psychiatric times. August 2003.Vol.XX, no.8.

Stewart A.J, Solol M., Healy J.M & Chester, N.L. Longitudinal studies of psychological consequences of life changes in children and adults. Journal of Personality and Social Psychology, 50, 1986, 143-151

Stout, Chris E. The psychology of terrorism. Praeger: Westport, 2002

Stress Less®. http://www.stressless.com/stressinfo2.cfm

Sutker P.B., Uddo M., Brailey K., Allain A.N. Jr. War-Zone trauma and stress-related symptoms in Operation desert Shield/Storm ODS returnees. Journal of Social Issues, 1993. 49, 33-49

Thoits, P.A. Dimensions of life events that influence psychological distress: an evaluation and synthesis of literature. In H.B. Kaplan (Ed.) Psychological stress: trends in theory and research 1983, 33-103. New York, NY: Academic Press.

United States, Doctrine for Health Services Support in Joint Operation. Field Manual 4-02.51 (Final Draft).

United States, Joint Task Force Planning Guidance and Procedure. Joint Publication 5-00.2, 13 January 1999.

Zamorski M.A. Evaluation of an enhanced post-deployment health screening program for Canadian forces members deployed on operation APOLLO (Afghanistan/SW Asia) preliminary findings and action plan. Post-deployment health section directorate of medical policy Canadian forces medical group. 13 June 2003.