

PROLONGED INCARCERATION: EFFECTS ON HOSTAGES OF TERRORISM

W Busuttil

Medical Director and Consultant psychiatrist Combat Stress

Abstract

Background: In recent years there has been an explosion in the publicity surrounding hostage taking. There have been many well-publicized hostage, prisoner of war and politically motivated incarcerations. Increasingly hostages are being paraded on television and sometimes even films of executions posted on the internet. Hostage taking has usually occurred in countries where there has been political strife and war, especially, in recent years, in Iraq and Afghanistan, most recently involving British Royal Navy Personnel in Iran and a British journalist in Palestine.

Aims: The aim of this paper is to review the adult literature regarding hostage taking with a view to highlighting the most likely psychiatric disorders that can develop during such an experience. This will aid planning and implementation of hostage rehabilitation and family reintegration post release. This paper will help build insight into the experiences and potential clinical presentations of those held hostage under conditions of torture and threat of death. It presents a framework of needs allowing the planning of rehabilitation including how to manage the family and the media.

Conclusions: Further specific research is needed in order to assess the full needs of those released from prolonged incarceration held under threat of death. This will allow better planning for, and delivery of, rehabilitation of those released.

Key words: *Hostage, Incarceration, Post traumatic stress disorder, reunion, rehabilitation.*

Introduction

The effects of becoming a captive, being held in captivity and being subjected to various deprivations may seriously impair subsequent psychological and physical performance. A thorough understanding of short and long-term psychological, psychiatric and physical manifestations resulting from such traumatic experiences is essential if reunion, reintegration and rehabilitation needs of the released hostage are to be met.

Hostages and prisoners of war are faced with a difficult set of psychological and physical threats. All these threats need to be considered during later psychological rehabilitation.

They comprise:

- The impact of events leading to the initial capture.
- The impact of capture itself.
- Torture and Interrogation.
- Solitary versus group confinement.
- Physical deprivations.
- Adaptation to prolonged incarceration.
- Coping with psychiatric symptoms during incarceration.
- Coping with the release, return and reunion.

The impact of events leading to the initial capture

Usually, events leading up to capture involve a gradual build-up of psychological threat. On occasions, however, there is no

psychological threat or warning and capture is sudden [1]. Prior to capture, prolonged, insidious or acute direct or indirect exposure to brutalizing experiences, is a common experience for serviceman, or civilians exposed to war zones and in some circumstances peacekeeping operations or refugee care. The loss of friends and scenes of death and destruction, are commonplace. These threats may magnify feelings of powerlessness, loss of control or lack of choice or may have the opposite effect of hardening resolution.

The antecedents to conflict are usually characterized by a build-up of psychological tension, which culminates in relief once the war starts. While this may be the case for servicemen, it may be different for civilians, especially foreign workers such as journalists or refugee aid workers who operate in war zones. These people, along with the indigenous civilians, usually try to get about doing their normal job, and to live as normally as possible. While they are in the centre of the conflict, they are really once removed from it and this may lead to feelings of powerlessness over a situation that is beyond their control. Depending on the circumstances, the individual may have already been exposed to extreme psychological trauma, may already feel a loss of control, and may even be displaying psychological and psychiatric symptoms before capture has occurred.

The Impact of Capture Itself: Acute Reactions to Captivity

From the moment of capture the victim is held in a state of "torture" by his captors [2]. Captivity places the victim in a state of fear for his life and physical safety. Depending on the circumstances and the reason for capture, anticipatory fear as to what will happen next may be intense. Control over self-determination is lost. If the captors require information, subjection to methods of torture is likely. Methods used by

Corresponding Author: Wing Commander Walter Busuttil
MB ChB M.Phil MRCP MRCPsych RAF (Retd)
Medical Director and Consultant Psychiatrist,
Combat Stress (Ex-Services Mental Welfare Organization).
Tyrwhitt House, Oaklawn Road
Leatherhead, Surrey KT22 0BX
Telephone Number: 01372 841600
dms@combatstress.org.uk

captors during the initial stages of incarceration include separation and isolation of captives, the use of blindfolds, coercion to give information, cocking of weapons behind the captive and mock executions. The media are often used with the parading of captives on television, the reading of confessions and displays of apparent cooperation between victims and captors. Some captors do implement absolute media silence regarding the fate of the hostage. Others still will sell the hostage to the highest bidder amongst the many terrorist factions.

This initial exposure to multiple psychological stressors compounds the intense trauma of being reduced to a state of captivity. Fear is mixed with anger and self reproach at being captured. In the case of prisoners of war (POWs), relief at having survived the ordeal of combat and subsequent capture may also be present. Inevitably self-esteem is threatened and this whole initial experience may become emotionally overwhelming, leading to acute and longer term consequences.

The acute consequences may be understood from observations made on those subjected to extreme stress [3,4]. As personal control over events is progressively lost, attention tends to narrow its focus and elements of dissociation may begin to emerge. Time perception slows down, events unfold in "slow motion", and while there is limited awareness of surroundings, emotions may be held back. When the full impact of the traumatic event has been endured, subsequently the full force of the emotional response will appear [5,6]. War Captivity has been found to be more stressful than other psychologically traumatic experiences including childhood life events, and combat experiences [7].

Three stages in the emotional response of those subjected to personal attack are described: the Impact, recoil and reorganization stages [4].

1. The Impact stage is characterized by emotional shock with feelings of numbness, helplessness and vulnerability.
2. The Recoil stage is characterized by fluctuating tension with waves of anger and blame, which may be internally or externally directed.
3. The Reorganization stage is characterized by a restored sense of equilibrium, with an increase in the amount of intellectual energy available for investment in activities unrelated to coping with victimization.

Other workers, with reference to hostage taking and kidnap, described four predictable sequential phases in victims' responses [3]. The nature and quality of contact with the perpetrator influence the duration and intensity of each phase. The four phases comprise:

1. Initial shock and disbelief leading to denial.
2. Circular bouts of apathy, rage, resignation, irritability, insomnia, startle reactions and replay of the traumatic events through dreams and fantasies followed by recrimination.
3. The replay of the traumatic events is evaluated under normal conditions after the ordeal is over, and not processed under conditions of induced terror. The author notes that in the case of extensive contact with the criminal, such as in prolonged hostage taking, it is unlikely that any significant behavior characteristic of phase three would be seen. The hostage would in the active presence of criminal terror still respond as if he was in phase two. Prior personality patterns exert their influence during phase three. Those who have been previously "excessively dependent on others" being prone to developing constricting and depressive behaviour. Phobic responses are common, along with the formation of hostile dependent relationships with family and friends. Others whose personalities, have previously been "freedom oriented, detached from others, or power oriented and

aggressive" tend to intensify their prior behaviour: becoming more removed from other people, developing into reclusive irritable individuals.

4. Phase four is reached as the individual attempts to integrate and adapt the traumatic experience into future behaviour and lifestyle. This phase of resolution and integration is characterized by the development of increased hypervigilance, designed to minimize or prevent future victimization. Reevaluations, particularly of attitudes towards other people can be profound.

This phasic process is similar to the development of acute stress disorder leading on to acute post traumatic stress disorder and then to chronic post traumatic stress disorder [8]. Research on survivors of incarceration strongly supports the suggestion that PTSD is a common consequence of this process [9].

In cases of lengthy incarceration, these stages/phases described above are prolonged. The final stage of Reorganization will be postponed until final release, and only then will be accessible for normal processing. The same will apply to the third and fourth phases [3, 4]. Exposure to further complicating stressors beyond simple incarceration and loss of freedom such as torture, and solitary and group confinement, will inevitably result in the emergence of complex patterns of adaptation during captivity, the unraveling of which will result in a challenging prospect for those involved in rehabilitation. Difficulties involved in performing this rehabilitative task fully, combined with the resistance of the released captive to tackle the more frightening issues, will inevitably lead to the development of the long term, often chronically disabling reactions mentioned above. PTSD represents only one of a possible range of long term reaction as will be described.

Torture and Interrogation

The term "Torture" is defined by the World Medical Assembly in The Declaration of Tokyo 1975, as "*the deliberate or wanton infliction of physical or mental suffering by one or more persons acting alone or on the orders of any authority, to force another person to yield information, to make a confession or for any other reason*" [2].

Psychological and Physical torture aim to impose the purpose of the torturer against the will of the victim. Physical torture has a psychological impact [10]. The primary aim of torture is to bring about specific psychological changes in the victim rendering him vulnerable to the coercive persuasions of the torturer.

Torture procedures have been classified into: "*weakening techniques*" and "*personality destroying techniques*". The former induces helplessness in the victim and the latter induces: guilt, fear and loss of self-esteem. These techniques are delivered in three main ways, which may or may not be deliberate [10]. They include:

- Deprivation Strategies.
- Constraint Strategies.
- Communication Strategies.

Deprivation Strategies

Deprivation is caused by a reduction in environmental stimulation. Usually a victim is subjected to different forms of deprivations simultaneously [11]. Visual deprivations include use of blindfolds, poor light contrast and color. Auditory stimulation may be limited to whispers if victims are held in groups, threatening commands from the guards or the sounds of noise outside the place of confinement. Paradoxically the use of white noise may be used to under stimulate the victim by blocking out other sounds. The sensations of smell and taste are limited by a monotonous diet and stale air resultant from the living conditions [12]. Sensations of touch may be limited by

the confines of a cell and few personal possessions. Kinesthetic deprivation effects result from tying of limbs or chaining, with impairment of dexterity, physical discomfort and pain [13].

Constraint Strategies

The victim is forced to submit to experiences and stimuli that are alien in terms of conduct and personality. Victims are forced to obey a set of rules and regulations resulting in close supervision where everything is controlled. Violation of these rules is used as an excuse to punish. Basic human dignity and identity are violated by repeated exposure to humiliation and degradation, reinforced by lack of basic sanitary and hygienic standards.

The induction of incongruent actions is also used. Victims are forced to make impossible choices and consequently act against their beliefs or ethics. Mock executions and threats of reprisals against others and the forced witnessing of others being physically tortured or worse, unless the victim does not fulfil demands, are examples. The effectiveness of these techniques deeply wounds the identity and dignity of the victim and is closely linked to feelings of guilt, fear and loss of self-esteem. During torture and imprisonment aggressive drives are repressed especially if there is no means of expressing emotions and this leads to an erosion of the personality [12].

Communication Strategies

These include verbal and non-verbal forms. In double bind methods exposure to ambiguous and contradictory messages induces confusion: so-called "hard man / soft man" approaches to interrogation being one example. Conditioning methods, where desired behaviours are induced by pairing them with certain conditions and promises, produce results as predicted by behavioural experiments [14].

Torture: Physical Methods

Physical torture includes systematic and non-systematic beatings, blows, rough handling, the delivery of electric shocks and the subjection to anoxic episodes in "submarino" torture. Pharmacological drugs are also used. Punishments including periods spent in solitary confinement, enforced food deprivation and forced marches, add to the psychological damage [2,9,12].

Torture: Sequelae

Although PTSD represents a useful diagnostic entity, it does not go far enough in explaining the wide range of symptomatology seen in torture survivors. PTSD is an important but insufficient diagnosis to explain the whole of the reaction to torture [15].

The psychological sequelae of torture have been described as including [2,15]:

1. A Traumatic Stress Reaction: characterized by the three core symptom clusters of PTSD: re-experiencing, avoidance and hyperarousal phenomena.
2. An "Existential Dilemma", described as the effect on personal value systems – for example, changed personal religious or political thinking or core beliefs in a just or meaningful world. The main complications of this "dilemma" are survivor guilt and guilt feelings resultant from acts of commission or omission during the torture experience.
3. Major Depressive Illness or depressive symptoms: mainly the result of loss events. These events include the loss of limbs, special senses, health, family, friends, freedom and social status.
4. Physical symptoms: which could be psychological in origin i.e. somatisation symptoms and disorders; or genuinely physical in aetiology and nature.

Solitary versus Group Confinement

Solitary confinement may be experienced as a result of punishment, as part of psychological torture or may be enforced if the victim is the only prisoner taken. Acute psychotic conditions have been noted in POWs who could not communicate verbally with their fellow captives and captors because of difficulties of language [16]. Studies on voluntary immigrants and refugees subjected to isolation show an incidence of psychosis five times higher than expected in a corresponding (native) population [17].

The problems of extreme isolation have been documented in the context of polar explorers and arctic winter dwellers [18]. Interest in the field was generated by sensory deprivation experiments which showed a hitherto unrecognized source of anxiety, tension, inability to concentrate or organize one's thoughts, vivid sensory imagery - usually visual and sometimes reaching hallucinatory levels, body illusions and somatic complaints [19]. Some researchers concluded that former hostages, after having been exposed to severe, long enduring sensory deprivation were at risk of developing the "concentration camp syndrome and faced annihilation as a person" [20].

Interest in group confinement developed in the late 1950's following an increase in the need for small groups of workers to operate in isolated environments. At face value, group confinement would appear to be a better prospect than solitary confinement. However, it has its own intrinsic problems. These problems have been summarized under three headings [13]:

1. Interpersonal Stresses
2. Group Interactions
3. The Relationship with the Outside World.

Interpersonal Stresses

These result from overt or covert interpersonal frictions with pronounced irritability, hostility and personality conflicts. Experiments have been carried out using sets of groups matched for theoretical compatibility/incompatibility, (on the basis of extent of similarity or dissimilarity of its members on personality test measures of dogmatism, needs for affiliation, achievement and dominance.) Observations were made on two sets of compatible/incompatible groups that were confined in a small room and given a fixed schedule of work each day but were otherwise cut off from outside contacts. Incompatible groups reported more subjective stress and emotional symptomatology as compared to the compatible sets. The experimental conclusion was that clearly interpersonal compatibility was vital in confined groups (of workers), than in groups operating in more enriched environments [13].

Group Interactions

The interdependence of members of a confined group may block many overt expressions of problems created by confinement. In such a situation, individuals cannot afford to alienate the remainder of the group. Many other forms of behaviour emerge instead. In many experiments, communication and other interactive activities are seen to decline with time and territoriality and privacy needs assume prominence with withdrawal from group activities as the end result [13]. Loneliness is commonly reported despite individuals being surrounded by others sharing confinement.

Relationship with the Outside World

The meaning and influence of society diminishes in isolated groups. Frustrations within the group are manifested by the display of aggression, hostility and anger directed at people and objects external to the group. The loss of information about outside events, about activities of others and lack of feedback

from outside sources are important influences on the functioning of isolated groups [13]. In victims of incarceration, much anger will inevitably be directed against the captors, although transference and counter-transference issues including the development of the Stockholm Syndrome cannot be ignored. The Japanese Embassy Hostage Crisis in Lima, Peru, of December 1996 produced the so-called Lima Syndrome in which the opposite effects from the Stockholm syndrome occurred. Rather than the captives becoming submissive, this incident showed signs of the captors becoming more sympathetic to the predicament and needs of their hostages [21].

Coping With Confinement

A variety of coping techniques are used by those held in solitary confinement [11]. No systematic studies exist, and reports are anecdotal and come from personal accounts. The most frequently described methods comprise some form of mental exercise or work ranging from counting pebbles to complex intellectual exercises; keeping a log or diary, and looking for 'ones self and inner strength' [1,22,23].

In most cases of survivors of isolation it was the first exposure that provoked the greatest fear and some previous experience was of great help despite the symptoms [11]. This point is helpful in understanding the effects of the intermittent subjection to solitary confinement as in the case of POWs, where solitary confinement is a common form of punishment.

A common factor found in groups subjected to isolation under experimental or occupational conditions, was the conviction that they would inevitably survive. With regard to victims of incarceration as a result of war, persecution and terrorism, survival fears are reported initially, but diminish as a stage of adaptation to confinement is passed. This is in keeping with the phasic / stages processes described above [3,4]. This adaptation stage is related to the reason for and the nature of the enforced confinement. Thus in relation to the survival fears of Nazi concentration camp inmates, despite the high death rates of the camps, optimism regarding survival increased the longer the imprisonment lasted. Moreover survival by any means became the main motivating factor for this category of victim [12].

Boredom and monotony are frequent reactions to long term group confinement including in highly motivated groups such as astronauts in training. A common counter mechanism to this is widespread day-dreaming accompanied by an intense desire for change, even though change was not in the best interests of the mission. A decline in motivation and morale results in intense feelings of home-sickness, and is related to imposed regimentation. Variation in routine revealed that improved morale appeared to be an inverse function of imposed regimentation [13,24].

There are considerably fewer instances of problematic emotional symptomatology found in group confinement studies than in studies of individual isolation. Illusions, vivid dreams and psychotic symptoms are rare. More characteristic are sleep difficulties, depression, low mood, compulsive behavior and psychosomatic problems [13].

Studies which compare the effects on those held under both categories of isolation are uncommon. In one such study, however, the development of psychiatric symptoms, mainly of PTSD was less likely in USAF Viet Nam Veterans who were captured after 1969, when solitary confinement became rare [25]. In the same group of USAF veterans, an increased rate of psychiatric morbidity was evident amongst the pre-1969 shoot-downs, with an increased percentage in psychiatric diagnoses, from 23.2% at time of repatriation to 27.1% at five year follow up, while the percentage in the post-1969 group decreased from

23.4% to 19.7%. These findings were correlated with the termination of the practice of solitary confinement and a general improvement in conditions [26]. In a separate study of USAF ex-POWs similar conclusions were not in evidence, but the sample studied was small and the POWs had only been subjected to relatively short periods of solitary confinement in relatively less adverse conditions [27]. Overall it was thought that the "group" in confined prisoners was protective in the development of psychiatric symptoms [26].

The evidence from experimental studies of group confinement has already been presented, but other postulates as to what these protective elements are can be made. Despite the theoretical establishment of territorialism and withdrawal from group activities, people held together as prisoners in confinement are likely to talk informally about their predicament: the facts of their situation, resultant emotions and feelings, and their sensory perceptions or lack of them. This may enhance emotional processing [28] and may be protective against the development of PTSD and its symptoms in people who have been subjected to overwhelming stressors [29]. Therapeutic Group Factors [30] could also be viewed as beneficial. Although a group of prisoners does not constitute a therapeutic group, some of their interactions are similar. For example, the universality of their predicament can be seen as the major binding factor from which other group factors stem. Indeed the isolation of solitary confinement serves to enhance the individual's sense of uniqueness that deprives him from mutual validation in a relationship with other persons.

Discussion of personal relationships with people left behind may enhance individual self-awareness, introducing the possibility of similar group dynamics as seen in "T" Groups with further benefits [31]. Group Dynamic Theorists emphasize that the essence of any group is the interdependence of its parts. The unique situation of confined prisoners would probably serve to exaggerate certain aspects of this interdependence. In the case of military POWs leadership is already preordained by the rank structure, unless this has broken down. In the case of civilian hostages, the emergence of a leader and spokesman could at times be vital for their very survival. This leadership would inevitably be strengthened by the unanimous approval of all "parts" of the group. This argument supports the fact that at least a degree of interaction is necessary in groups held in captivity. Institutionalizing effects should not be forgotten [32]. In the POW or hostage prison, the "Mortification Processes" and the potential for the development of an institutional neurosis [33], are no less in evidence and must be taken into account by those responsible for rehabilitation after release.

Physical Considerations

Physical complications in those subjected to incarceration have been extensively documented in Vietnam POW, [12,34-38]; and ex-POWs [39-46].

Studies reveal two categories of disability

- Physical diseases, which are purely the result of environmental, insults such as: endemic infectious disease, malnutrition, trauma and neglect by captors of previous or ongoing physical disease.
- Disorders correlated to percentage body weight loss, arising as a result of, or in relation to, the subjection to biological and psychological stressors.

Turning to the first category, the evidence is that environmental conditions are crucial in determining short and long term morbidity and mortality rates. Thus Holocaust concentration camp inmates had higher rates of physical disease than Allied World War II Far Eastern POWs (FEPOWs), who

were allowed personal possessions including food. The latter in turn, had higher rates than Allied World War II POWs held in Europe whose captivity conditions were more humane, [12,39,40,43,44].

Environmental considerations include the subjection to poor diet, poor hygiene and sanitary conditions, overcrowding, lack of medical facilities, the subjection to inhumane working schedules, and indigenous endemic diseases.

The value given to the prisoners by their captors is also an important determining factor. This would not only take into account the reasons for the incarceration but include attitudes of the captors. Thus Jewish victims of the Holocaust were subjected to a multitude of deprivations with the ultimate aim of extermination as opposed to Allied World War II POWs held by the same Nazi regime who were generally treated in accordance with Geneva Convention dictates, with access to medical care [12,35]. Inevitably their long term mortality and morbidity rates were significantly lower [40,42].

The effects of percentage body weight loss have been studied in relation to postulated organic brain damage manifested by defect states and cognitive deficits. The first reports came from multidisciplinary studies of Danish, Norwegian and Israeli Nazi concentration camp survivors. A defect state was described: initially called the "K Z Syndrome" [KZ stands for: Konzentrations Lager (German), meaning Concentration Camp], and later defined as the "Concentration Camp Syndrome" [34-36,38].

It was characterized by twelve severe chronic psychiatric and non-specific somatic symptoms including: increased fatigue, impaired memory, dysphoria, emotional instability, sleep impairment, feelings of insufficiency, loss of initiative, nervousness; restlessness and irritability; vertigo, vegetative lability, and headache. Survivors also frequently reported subjective symptoms of anxiety, nightmares, depression, alcohol abuse and reduced alcohol tolerance. Workers making observations in concentration camp survivors who were later interned in displaced person's camps after the end of World War II recorded frequent re-experiencing phenomena associated with emotional numbing, apathy, survivor guilt and a variety of psychosomatic symptoms including hyperarousal, and anxiety and avoidance phenomena [37,47].

Some workers argued that this condition resulted from organic brain damage as a result of starvation, avitaminosis and head trauma, and that milder forms of the syndrome were linked to a history of encephalitis, spotted fever, a duration of over three years in captivity, and to a level of starvation corresponding to a relative weight loss of 35% or more [34-36,38].

In Korean War and World War II POW survivors suffering from 35% weight loss or more, correlations were made to the subjection to the more severe biological and psychological insult. Weight loss was positively correlated with later cognitive impairment. Arguments that these findings merely reflected head trauma, were negated by eliminating those who had experienced more than momentary lapses in concentration during their ordeal [45]. In spite of other studies which correlate POW captivity weight loss with an increased risk of subsequent development of depression and PTSD symptoms, which may in themselves account for a degree of cognitive impairment [27], these findings were not solely attributable to gross psychological disturbance alone, and disrupted concentration, attention, memory and higher order cognitive functions, are probably also independently linked to both biological and psychological factors [45].

Physical insults therefore may account for variable defect states which correlate positively with the degree of body weight loss. These defect states may co-exist with psychiatric disorders

resulting directly from psychological trauma, with depressive illness and PTSD being the most important. Bearing in mind that all of the PTSD symptom clusters as defined by DSM-IV have at some stage been included in the original descriptions of the Concentration Camp Syndrome, one may postulate that what was included in the original definition of the syndrome was the interdependent co-existence of an organic defect state and PTSD, resultant from a significant weight loss which has strong positive correlation with the subjection to an inordinate degree of psychological stress. Defect states may however present in their own right, as a direct result of head injury or CNS infection. It is interesting to note that modern evidence strongly suggests that typical symptom clusters in DSM-IV definable PTSD can be generated by psychological trauma without any correlated physical insult or deprivation.

Personality change and Adaptive styles

Each individual copes differently in the face of adversity as governed by protective and interactive factors [48]. The individual can hope to be equipped with inherent assets: personality characteristics, inborn coping mechanisms and previous experience in handling adverse situations. Despite the high incidence of psychiatric symptoms and disorders occurring in the short and long term, varying adaptive styles and personality changes have been reported in relation to the POW experience, and other hostage incidents from which we can draw some insight. Studies of Korean War and World War II POWs report the development of an "apathy syndrome" following exposure to extreme stress [49,50]. This is similar to the process of "psychic numbing" reported in survivors of other traumatic events [51, 52].

A study of the apathy syndrome in World War II POWs focussed on the loss of hope and experience of helplessness, which culminates in the withdrawal of libido from external objects [50]. A similar syndrome was identified in Korean War veterans immediately after repatriation which was related to the chronic repression of aggression and the adaptational demands of captivity [49]. We have already seen from studies of small isolated groups, [18,53]; and hostage victims, [3] that adaptive personality changes can allow adjustment to the enforced situation.

In contrast to the observation of the apathy syndrome, other studies observations' varied. In one Viet Nam POW study, pre- and post- captivity personality structures were compared [9]. A movement towards character rigidity, decreased interpersonal relatedness and a heightened drive to master and achieve, accompanied by the experience of time pressure were observed. Such alterations in style were postulated as being neither pathological nor beneficial, but dependent on the starting point of the individual's personality structure. Thus the aversive experience was thought to cause a shift along the spectrum of personality dimensions in one direction. Hence what may produce an obsessive-compulsive style in normal subjects may lead a basically dependent individual with little self-motivation to a more productive personality style. These personality changes reflect both adaptational and intra psychic shifts. Character rigidity, manifested in isolation of affect and a stubborn, unifocal determination and a decrease in interpersonal relatedness served an adaptive function in captivity. In this way the captive was protected from the internal experience of fear, loss and rage, and could deny the presence of interpersonal needs [9]. These observations are in keeping with the theoretical findings already described, [13] of increased territoriality and withdrawal from interpersonal interactions in experimental groups subjected to prolonged isolation.

In other studies, workers report that some prisoners felt that

they had benefited from their experience. Two studies noted that one adaptive response to captivity is to turn it into a growth experience [54,55]. Sixty-eight percent of former British Human Shield Hostages held in Iraq, felt they had benefited from their ordeal in that it had promoted personal growth and understanding, and had heightened the value they attached to interpersonal relationships [56].

Another study found that many POWs feel they missed out on important life experiences, including the chance to grow and develop with their families, and work experience. Some believed that captivity had left them impaired physically and psychologically. Others however, did not seem to sense these impairments. These individuals approached their lives with a new set of values, concerning work, family and relationships with others. They also insisted that they were wiser, more content and knew themselves and their environment better. They responded to the challenge of captivity as an opportunity to experience their human limits, and they defined their abilities and limitations more sharply than most other people. They reported feeling more self confident and stronger than before their captivity. For some, the experience was a dividing line between an old and a new life, sometimes dramatically different: with a new family, job and orientation to the future. The subjective sense of having benefited from incarceration is positively correlated with the harshness of the experience, some individuals who experience extremes or the unusual, or who must make great sacrifice, may believe that they must grow from, or are advantaged by their experience [57]. The latter has been observed in astronauts [58].

There may be a more simple explanation in that these individuals could belong to the so called "stress resistant" group, who are oriented towards meeting challenge, change and feel more in control of events in their lives in general [59]. It is possible that both the 'adaptational shift' and the 'stress resistance' may be operating together at times of extreme stress.

Psychiatric Symptoms and Disorders that can develop during and after captivity

The multifaceted nature of the captivity experience is evident from the number and nature of stressors victims are exposed to. This raises the question as to whether the resultant psychological and psychiatric effects are similarly multifaceted. A closer look at the subjective stressors, however, reveals many common threads. The evidence presented so far shows that induced disorders resulting from: the acute effects of capture, subjection to torture, the effects of solitary and group confinement, and the sequelae of physical insult and weight loss, are in fact similar and mutually reinforcing. Six well defined categories of psychological and psychiatric sequelae can potentially emerge:

1. Stress Disorders: usually Post Traumatic Stress Disorder, as a result of the initial trauma of capture, the subjection to torture, the stresses of solitary and group confinement and the positive correlation with weight loss.
2. Depressive Disorders: mostly correlated with the subjection to torture, loss events, and the captivity experience itself.
3. Cognitive Defect States: related to weight loss, head injury and CNS infections.
4. Psychotic States: as a result of isolation and confinement.
5. Personality changes - Character Changes these may include growth experiences or a deterioration of the personality: captivity experience itself: coping style and locus of control
6. Physical Illness - Somatiform and Genuine. The somatic symptoms reported may form part of PTSD or the depressive picture.

Release, Reunion and Reintegration issues

On release hostages and POWs have specific practical, psychological, social and operational needs which must be taken into account by those receiving them. These needs are summarized in Table 1 and are highlighted in detail elsewhere in the literature [60-63].

Reorientation:

Give back a watch, writing materials, mobile phone
Details of family, family members' health news, eg: any deaths in the family
Protect from media, control of news papers and news bulletins they have access to as necessary
Safe secure environment
Physical checks, examination and investigations.

Reunion with family

Privacy
Media control

Operational Debrief:

Bring up to speed with organization they were taken from
Circumstance of capture operational impact

Psychological / psychiatric assessment:

Psychological / Psychiatric Assessment
Psychological / Psychiatric interventions: crisis intervention principles initially, Trauma Focused CBT techniques if necessary.
Appropriate follow-up.
Family work
Reintegration with family

Table 1: Needs post release:

Family Issues: – Clinical effects of separations enforced under prolonged threat of death

The psychological effects of these kinds of separations on family members are complex. Essentially the family goes through a grieving process called 'anticipatory grief' where family members potentially go through all the stages of grief. If the anticipatory grief completes and the hostage does not return in the long run the family adapts to the loss well. If the grieving process completes then on release the family will have difficulties reintegrating. If the grieving process does not complete and the captor is 'kept' in the 'thinking' of their family members then the family will cope badly with the separation but this increases the likelihood of full family reintegration. Psychiatric symptoms disorders and behaviours including depression, PTSD and alcohol abuse and increased suicide rates are reported in family members of the hostages / POWs [64,65]. Help and support pre and post release should be delivered as documented in Table 2.

Conclusion

Any attempt at rehabilitation following release must take into account that all or some of these potential clinical states might be present in the victim. Reconstructive work can commence only after a careful initial psychiatric assessment, which is essential in order to establish the presence, nature and severity of any of these clinical states resultant from the ordeal.

Other important aspects such as the effects of the father/husband absence on the family unit, and the potential traumatic nature of the reunion of the family unit itself must also be considered.

1. Help should be available to all family members of the nuclear family, and children of all ages must not be forgotten.
2. Practical support that encourages independence is helpful providing the husband's return is expected and incorporated within a cognitive framework.
3. Psychological support which allows planning for the husband's return, reunion and re-integration should be part of any group or individual therapy given to wives and children. It should be recognized that grieving is part of the separation process, but that completion of the grieving process may have detrimental effects for the family in the long term after release.
4. Physical illness may be a manifestation of severe psychological stress and somatiform illness should be excluded. Appropriate medical and psychological treatment should be instituted.
5. Psychological and psychiatric symptoms and syndromes are common, and should be screened, assessed and treated, in their own right. Care in doing this must be taken, as suicidal ideation is relatively common.
6. Alcohol abuse and dependence along with other harmful practices such as smoking require screening, advice and treatment.
7. The help delivered during the separation should be directed and linked into the help, which will be delivered after release and in relation to issues concerning reunion and re-integration dynamics. In some cases as in the Beirut hostages and the Australian care workers this proviso has worked well, and has been much appreciated by those released as well as the family members left behind [66, 63].

Table 2: Family separations resulting from circumstances of extreme psychological threat [64, 65]:

References

1. McCarthy J, Morell J. *Some Other Rainbow*. 1st Ed. London: BCA; 1993.
2. Turner S, Gorst-Unsworth C. Psychological sequelae of torture a descriptive model. *Brit J Psych* 1990; **157**: 475-480.
3. Symonds M. Victim responses to terror. *Ann New York Acad Sci* 1980; **347**: 129-136.
4. Kennedy DB. Implications of the victimization syndrome for clinical intervention with crime victims. *Pers Guid J* 1983; **62**: 219-222.
5. van der Kolk B.A. Trauma and Memory. In *Traumatic Stress: The effects of overwhelming Experience in the Mind, Body and Society*, (eds B.A. van der Kolk, A C MacFarlane, L Weisaeth) pp279-302. New York: Guilford Press; 1996
6. van der Hart O, Nijenhuis ERS, Steele K. Dissociation: An insufficiently recognized major feature of complex posttraumatic stress disorder. *J Traum Stress* 2005; **18**: 413-423.
7. Solomon Z. The effect of prior stressful life experience on coping with war trauma and captivity. *Psychol Med* 1995; **1289**-1294.
8. American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (4th edition) 2004; Washington DC: APA; 1994.
9. Ursano RJ. The Viet Nam era prisoner of war: pre-captivity personality and the development of psychiatric illness. *Am J Psych* 1981; **138** (3): 315-318.
10. Somnier FE, Genefke IK. Psychotherapy for victims of torture. *Brit J Psych* 1986; **149**: 323-329.
11. Schultz, D. P., (1965). *Sensory restriction: effects on behaviour*. New York Academic Press.
12. Cohen, E.A., (1954) *Human behavior in the concentration camp*. London, Jonathan Cape.
13. Zubeck, J. P. (1969). *Sensory deprivation: fifteen years of research*. New York: Appleton-Century-Crofts
14. Skinner, B. F. *Science and Human Behaviour*. New York: Macmillan; 1953.
15. Turner, S. Psychiatric help for survivors of torture. *Adv Psych Treatment* 2000; **6**: 295-303. RCPsych.
16. Allers R. *Über Psychogene Störungen in Sprachfremder Umgebung. (Der Verfolgungswahnder Sprachlich Isolierten)*, Zeitschrift für die gesammelte Neurologie und Psychiatrie 1920; **60**: 281-289.
17. Eitinger L. The incidence of mental disease among refugees in Norway. *J Ment Sci* 1959; **105**: 326-338.
18. Palmai G. Psychological observations on an isolated group in Antarctica. *Brit J Psych* 1963; **109**: 364-370.
19. Heron W, Bexton WH, Hebb DO. Cognitive effects of decreased variation in the sensory environment. *Am Psychol* 1953; **8**: 366.
20. Solomon P, Kleeman ST. Sensory deprivation. In: Kaplan, H. I., Sadock, B.J., *Comprehensive Textbook of Psychiatry*. ; 6.3: 321-326. 4th Ed. Baltimore; 1985.
21. Catalinotto, J. *After the Bloodbath, the Truth is Revealed: Washington's Hidden Role*. Workers World, 8 May 1997.
22. Waite T. *Taken on Trust*. 1st Ed. London: Quality Paperbacks Direct; 1993.
23. Keenan B. *An Evil Cradling*. 1st Ed. London: BCA; 1992.
24. Wolfe RT. *The Right Stuff*. 1st Ed. New York: Farrar, Straus, and Giroux; 1979.
25. Ursano RJ, Wheatley RD, Carlson EH, Rahe AJ. The prisoner of war: stress, illness and resiliency. *Psych Annals* 1987; **17**(8): 532-535.
26. Ursano RJ, Boydston JA, Wheatley RD. Psychiatric illness in U.S. Air Force Viet Nam prisoners of war: a five year follow up. *Am J Psych* 1981; **138**(3): 310-315.
27. Speed N, Engdahl B, Schwartz J, Eberly R. Post-traumatic stress disorder as a consequence of the POW experience. *J Nerv Men Dis* 1989; **177**: 147-153.
28. Rachmann, S., (1980) *Emotional processing*. *Beh Res Ther* 1980; **18**: 51-60.
29. Alexander DA, Wells A. Reactions of police officers to body-handling after a major disaster A before and after comparison. *Brit J Psych* 1991; **159**: 547-555.
30. Yalom I D. *The theory and practice of group psychotherapy*. 3rd Ed. New York: Basic Books; 1975.
31. Lewin K. *Field theory in social science; selected theoretical papers*. 1st Ed. D. Cartwright (ed.). New York: Harper & Row; 1951.
32. Goffman E. *Asylum*. 1st Ed. New York: Doubleday; 1961.
33. Barton R. *Institutional Neurosis*. 3rd Ed. Bristol; Wright; 1976.
34. Eitinger L. Pathology of the concentration camp syndrome. *Arch Gen Psych* 1961; **5**: 371-379.
35. Eitinger L. *Concentration camp survivors in Norway and Israel*. 1st Ed. London: Allen and Unwin; 1964.
36. Strom A. *Norwegian concentration camp survivors*. Oslo: Oslo University Press; 1968.
37. Chodoff P. Late effects of the concentration camp syndrome. *Arch Gen Psychiatry* 1963; **8**: 323-333.
38. Thygesen P, Hermann K, Willanger R. Concentration camp survivors in Denmark: persecution, disease, compensation. *Dan Med Bull* 1970; **17**: 65-108.
39. Nefzger, MD. Follow-Up Studies of World War II and Korean Conflict Prisoners. *Am J Epidemiology* 1970; **91**: 123-138.
40. Beebe GW. Follow up studies of World War II and Korean War prisoners. II Morbidity, disability and maladjustments. *Am J Epidemiology*, 1975; **101**(5): 400-422.
41. Klonoff H, McDougall G, Clark C, Kramer P, Horgan J. The neuropsychological, psychiatric and physical effects of prolonged and severe stress: 30 years later. *J Nerv Ment Dis* 1976; **163**: 246-252.
42. Keehn RJ. Follow up studies of World War II and Korean conflict prisoners. III: Mortality to January 1976. *The Am J Epidemiology* 1980; **111**(2): 194-211.
43. Gill GV, Bell DR. Persisting tropical diseases amongst former prisoners of war of the Japanese. *The Practitioner* 1980; **224**: 801-804.
44. Gill GV, Bell DR. The health of former prisoners of war of the Japanese. *The Practitioner*, 1981; **225**: 532-538.
45. Sutker PB, Galina ZH, West JA, Allain AN. Trauma-induced weight loss and cognitive deficits among former prisoners of war. *J Consult Clin Psychol* 1990; **58**: 323-328.
46. Sutker PB, Winstead DK, Galina ZH, Allain AN. Cognitive deficits and psychopathology among former prisoners of war and combat veterans of the Korean conflict. *Am J Psych* 1991; **148**(1): 67-72.
47. Friedman P. Some aspects of concentration camp pathology. *Am J Psych* 1949; **105**: 601-605.
48. Rutter M. Resilience in the face of adversity. Protective factors and resistance to psychiatric disorder. *Brit J Psych* 1980; **147**: 598-611.
49. Straussman HP, Thaler MB, Schien EH. A prisoner of war syndrome: apathy as a reaction to severe stress. *Am J Psych* 1956; **112**: 998-1003.
50. Greenson R. The psychology of apathy. *Psychoanal Quart* 1949; **18**: 290-302.
51. Lindermann E. Symptomatology and management of acute grief. *Am J Psych* 1944; **101**: 141-148.
52. Bene E. Anxiety and emotional impoverishment in men under stress. *Brit J Med Psychol* 1964; **34**: 281-289.
53. Bundezen PV. *Urgent cases of psychophysiological studies in the Antarctic, in Medical Research on Arctic and Antarctic Expeditions*. 1st Ed. Matusov L. Leningrad (ed), Gidrometeorologicheskve Izdatel' rov; 1971.

54. Schein EH, Cooley WE, Singer MT. A psychological follow up of former POWs of the Chinese communists: I. Results of interview study. Massachusetts Institute of Technology: contract No. DA-49-007-MD-754. (NTIS Accession No AD 243 779); 1960.
55. Segal J, Hunter EJ, Segal Z. Universal consequences of captivity: Stress reactions among divergent populations of prisoners of war and their families. *Int Soc Sci J* 1976; **28**: 593-609.
56. Easton JA, Turner SW. Detention of British citizens as hostages in the Gulf-health, psychological, and family consequences. *BMJ* 1991; **303**: 1231-1234.
57. Sledge, W. H., Boydston, J. A., Rabe, A. J., (1980). Self-concept changes related to war captivity. *Arch Gen Psychiat* 37, 430-443.
58. Rosen SC. Mind in space. *Med Serv Digest*, 1976; **27**: 4-17.
59. Kobasa SC. Stressful life events, personality, and health: An inquiry into hardiness. *J Pers Soc Psychol* 1979; **37**: 1-11.
60. Turnbull GJ, Busuttil W. The De Briefing of British Gulf Prisoners of War and Beirut Hostages. World Conference of the International Society for Traumatic Stress Studies, Amsterdam. Symposium 9.2, Abstract no: 172; 1992.
61. Turnbull GJ, Busuttil W. Hostage De Briefing. World Conference of the International Society for Traumatic Stress Studies, Amsterdam. Symposium 9.13, Abstract no: 309; 1992.
62. The Psychiatric Division of the Royal Air Force Medical Service. The Management of Hostages after Release. *Psych Bull RCPsych* 1993; **17**(1): 35-37.
63. Murphy P J, Turnbull G T. & Busuttil W. Providing Support to Long-Term Hostage Incidents. A CARE Australia Case Study. In: *Military Stress and Performance: The Australian Defence Force Experience* (eds G E Kearney, M Creamer, R Marshall, A Goynes) pp125-138, Canberra: Paul & Co Pub Consortium: Defence Science and Technology Organisation; 2003.
64. Busuttil W, Busuttil AMC. Psychological effects on families subjected to enforced and prolonged separations generated under life threatening situations. *Sex Rel Ther* 2001; **16**(3): 207-228.
65. Busuttil W, Busuttil AMC. Psychological effects on families subjected to enforced and prolonged separations generated under life threatening situations: A summary. DART Website. www.dart.org; 2003.