Disaster Syndrome

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GLOSSARY

disaster Usually refers to natural calamities such as floods, earthquakes, and fires. However, the term is also used more generically to include man-made calamities and other traumatic situations.

disaster phase Refers to time periods around disasters. Preimpact is the period before the disaster, impact is when it occurs, recoil is immediately after, postimpact is for days to weeks after, and recovery and reconstruction may go on for months or years.

survival strategies Biopsychosocial templates which evolved to enhance survival in specific circumstances. Examples are fight, flight, adaptation, and attachment.

trauma An experience in which one's life has been grossly threatened and from which a variety of biological, psychological, and social wounds and scars result.

traumatic situation Refers to external situations in which trauma occurs.

The term "disaster syndrome" was first used by Wallace in 1957 to describe a stunned, shocked state common in the impact phase of disasters. This is what the term has come to connote in disaster literature, and most of this article concentrates on this meaning of the term. Disaster syndrome overlaps with similar syndromes and they are drawn together into a coherent whole. Wallace described subsequent stages of disaster syndrome, which are now seen as part of subsequent disaster phases. Such disaster phases are briefly summarized here.

I. FEATURES OF THE DISASTER SYNDROME

Wallace described responses in Petun warriors who in 1649 returned to their village to find their kin had all been slain or captured. They sat down in the snow, mute, and no one stirred or spoke for half a day. Wallace noted that such responses are ubiquitously found in disasters and are variably described as "shock," "stupor," being "dazed," "stunned," and "numbed." He added that as well as sitting, victims may stand motionless or wander aimlessly. Emotions such as pain, grief, fear, and anger are missing, and people are docile. The state may

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last up to hours or even days, injured people remaining dazed longer.

II. THE PLACE OF DISASTER SYNDROME IN DISASTERS AND AMONG SIMILAR SYNDROMES

The behavioral features of the disaster syndrome are still valid in descriptions today and are called by the original name. However, various psychological, behavioral, and physiological lines of research have emphasized different aspects of what is behaviorally disaster syndrome and called them by different names. The psychological equivalent has been called psychic shock, the physiological equivalent general adaptation syndrome, while conservation-withdrawal syndrome spans all biopsychosocial aspects.

A. Psychic Shock

Psychic shock is the subjective view of being stunned. It has been studied most in bereavement and dying, seen there as the first stage of the grieving process. Subjective feelings of psychic shock as a response to being told news of death utilize physical metaphors such as an "assault," a "blow" to the face, head, or the guts, and as being "knocked out" or "winded." Psychological terms include being "overwhelmed," "not being able to take it," "the world shattering around one," and "sinking into a black hole." Defenses against such sensations include denial voiced as disbelief, and dissociation, described variably as feeling numb, experiencing a sense of unreality of the world or of oneself. A common description is looking at oneself and the events as if they were a film.

B. General Adaptation Syndrome

Selye described the general adaptation syndrome as a ubiquitous triad of physiological stress responses which were associated with psychic shock. The stress responses were enlargement of the adrenal cortex and increased levels of cortisone, shrinking of the thymus gland, spleen, and lymphatic structures (along with compromises of immunocompetence), and deep ulcers in the stomach. Selye noted that these responses helped organisms to adapt to overwhelming situations.

C. Conservation-Withdrawal Syndrome

Conservation-withdrawal syndrome, described by Engel and Schmale, expands on the definition of disaster syndrome by emphasizing immobility, quiescence, and unresponsiveness, accompanied by sagging muscles, feelings of extreme fatigue, constricted attention, and detachment.

Adding to the general adaptation syndrome, conservation-withdrawal is associated with parasympathetic, trophotropic activity, which may manifest in diminished heart rate to the point of arrhythmias and possibly asystoles and even death. Gastric secretions were noted to diminish, possibly because food intake does not occur in this state. The syndrome has been observed at all ages, ranging from neonates to adults, and in various situations where no definite course of action was possible.

III. SENSE AND PURPOSE OF DISASTER AND ASSOCIATED SYNDROMES

Initially it may be difficult to see responses to being overwhelmed as adaptive. However, just like physical shock helps survival, so may psychosocial shock. For instance, Darwin noted that immobility made animals less likely to be seen and be attacked, and the death-like state could stimulate predators to release their grip. Immobility could also help to scoop the unresisting person to safety and help members of the group to find its previously abandoned members. Further, the associated psychosocial limpness or docility may facilitate cooperation with helpers and their directions. Last, psychological encystment and conservation of energy could provide a buffer space for replenishment of reserves.

Selye and Engel and Schmale also saw their respec-

tive syndromes as primary regulatory organismic templates which enhanced survival of the species. They were at the opposite spectrum to fight and flight, and they occurred in situations where fight and resistance could be fatal, but "rolling with the punches," and surrendering old goals and finding new ones was advisable.

Valent integrated the biopsychosocial features and purposes of the above syndromes in a survival strategy which he called Adaptation. It adapted the organism to situations requiring initial surrender, but through processes such as grieving it facilitated turning to new hopeful situations and bonds. If this did not occur, physiological symptoms, depression, and other illnesses could occur (see below).

IV. UNFOLDING OF DISASTER PHASES AND OF DISASTER SYNDROMES

Features of later disaster phases and unfolding of disaster syndromes (or of the survival strategy Adaptation) follow.

A. Ensuing Disaster Phases

In the postimpact phases (Wallace's stages II and III) of disasters, survivors emerge from their cocoons. They are grateful to be alive, help others, and reconnect with family and friends. Survivors drop usual reserves to become a cohesive altruistic community. The accompanying optimism has been called the postdisaster euphoria. At the same time anger is often directed at outsiders whose help is seen as unempathic. In addition to Wallace's stages, recovery and reconstruction phases are the hard prolonged times of rebuilding the physical environment and internal lives. The names, timing, and contents of the phases are flexible, indicating fluctuating progression.

Similar phases occur in other traumatic situations, though different contents are emphasized in the literature. For instance, in bereavement psychological features are emphasized. After shock come phases of searching, then anger, guilt, and working through followed by acceptance and turning to new bonds.

B. Unfolding of Disaster Syndrome

Physiological stress response derivatives of disaster syndrome (or the adaptation survival strategy) may manifest clinically as hypotension, dizziness, tiredness, fatigue, and the sense of being "ill". Prolonged compromised immunocompetence may help to account for the increased rates of infections, autoimmune diseases, and cancers following disasters, bereavements, and other traumas. Thus this specific response may be importantly involved in the frequent stress-induced maladies. Maladaptive psychological unfolding includes hopelessness, despair, giving in, unresolved and chronic grief, and clinical depression.

V. TREATMENT

The treatment of psychic shock, like physical shock, includes physical and psychological warmth, comfort, and support. Physical contact with another human, reassuring voice, explanations of what is happening, hope, and connection with loved ones are helpful. Later treatment depends on the nature of evolving symptoms and illnesses. The best treatment is prevention or mitigation of circumstances where people are overwhelmed.

See Also the Following Articles

Alarm Phase and General Adaptation Syndrome; Bereavement; Disasters, Public, Effects of

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