

Stress Management- A Way Ahead

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Stress, Stressor and its Faces

‘Stress’, the term coined by Hans Selye (1907-1982), is defined as ‘a real or an interpreted threat to physiological or psychological integrity of an individual that results in physiological and/or behavioral response’ (Encyclopedia of stress). Stress is internal state of mind or body in response to real, symbolic, or imagined something perceived as: a threat to self or near and dear, beyond their resource and capacity available to handle and is associated with upsurge of psycho-physiological process, e.g. raised blood pressure.¹

Stressor is a thing, event, agent, or factor; new, different, or unusual to average usual resulting into stress.¹ Stressor can be a real thing or event, like: natural disasters, man-made or mixed. It is imagined or exaggerated one in many people, e.g. rumors at large or unfounded worry of something. Stressor might come suddenly, like thunder or gradual, like: political conflict. It can be acute/ short lasting (e.g. hurricane though its effect might linger on) or chronic/ long lasting (e.g. interpersonal conflict between mother-in-law and daughter-in-law in many homes).

Stress can be: ‘Dystress’- unpleasant/ adverse, ‘Neustress’- neutral and ‘Eustress’- pleasant. Amazing fact is that a simple, normal and usual thing for one person can be a turning point for other (Rutter, 1996), i.e. it can: 1. either close or open opportunities, 2. make a lasting change on the person's environment and 3. change a person's self concept, beliefs and expectations. Psycho-dynamically, people do attach different

meanings to same thing or event.

Three broad traditions of relating stress with disease risk are: Biological, Psychological and Socio-environmental. Socio-environmental tradition focuses on social, cultural, external environmental events or experiences that are normatively (objectively) associated with substantial adaptive demands. Psychological tradition highlights on individuals' subjective evaluations of their abilities to cope with the demands of specific events or experiences. Biological tradition relates activation of specific physiological systems that have been repeatedly shown to be modulated by both psychologically and physically demanding conditions.

Upon perceiving a stressor or situation as threatening and coping with effort and thinking, it becomes ‘perceived’ stress. Some factors are presumably stressful and may be associated with adverse consequences and are referred to as ‘presumptive’ stressors. Many of these stressors make the background of illness and are called ‘predisposing’ factors. Some stressors immediately precede the onset of illness and supposedly bring or initiate illness and are called ‘precipitating’ and others play role in sustaining the course of illness and are termed ‘perpetuating’ or ‘maintaining’ factors. Stressors which are man-made, beyond ones control, unmodifiable, involving threat, uncertainty, intension of harm, humiliation, e.g. rape, terrorism are reported as more deleterious for health.

Our major Stressors

Common stressors are daily hassles and changes, major life events, acute and short term problems, chronic and long term problems. It

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can be: environmental- natural disasters, flood, landslides, lightening, Tsunami, earthquakes, drastic changes in weather/ temperatures; social-strained interpersonal relationship, rape, sexual assault, theft, violence, dispute; political (political instability, strikes, bandh, conflict, mishaps, movement, rallies, jam, riots, attacks, war); economical (unemployment, loss, bankruptcy); physical (diseases, disability, death of near and dear), undue competition, lack of safety. Stressor can be in various domains (family, health, work) and may be age graded (school, marriage, retirement), history graded (war, depression), or non-normative (illness, divorce). It can be natural (e.g. earthquakes, floods), man-made (e.g. social, political) or mixed (disease epidemic, famine etc.).

While assessing stressor, ascertaining its nature of being general or specific, local or global, contextual or generalized, periodic or persistent, mild, moderate or severe, wide or of particular area or field, personal, family, society, country guides further course of action. Different tools, questionnaires and rating scales are available to assess stressor from various angles and aspects.¹ Thomas Holmes and Richard Rahe studied stressor among more than 5,000 medical patients based on Life Change Unit² which was also studied in other settings, including India³. As per these presumptive stress scales, top-10 most severe major stressors for an individual are: death of spouse, extramarital relationship, marital separation, suspension/ dismissal from work/ study, detention in jail of self or close family member, lack of child, death of close family member, marital conflict, property or crop damaged, death of friend.^{2,3}

Along with these universal, ubiquitous stressors; Nepalese are reeled under frequent natural

disasters (floods, land-slides, earth-quakes, lightening); poverty, illiteracy; unemployment forcing many productive-age people to leave home for abroad, compelled migration and refugee, human trafficking; inequality, injustice, discrimination, favoritism, political instability, conflict, corruption and backwardness. Epidemics of infectious diseases and dissociative disorders are common in Nepal.

During armed conflict, mental patients perceived political conflict itself as a stressor. Direct witnessing of conflict situation/ mishaps, psychological and physical trauma of self and family members or others, difficult travel and day-to-day activities were other stressors then.⁴ Leaving home for many Nepalese abroad workers⁵ and husband not being home for many mentally ill wives of abroad workers are common stressors⁶. Strained interpersonal relationship mainly with in-laws, illiteracy and unemployment status and major life events are other common stressors perceived by the later.⁶ COVID-19 pandemic has become a current global stressor.^{7,8} Real threat of infection is compounded by corona fear due to ignorance and inappropriate depiction in media.⁹ Many stressors are global and ubiquitous affecting all human being. Mega earth-quakes, 2015 affected Nepal and neighboring countries.¹⁰ Some stressors locally affect particular areas.

B. P. Koirala Institute of Health Sciences (BPKIHS) is a pioneer health science institute in Nepal, with major contribution in health science education, health service and research through its various stakeholders: teachers, faculty, doctors,¹¹ nurses,¹² students,¹³ staff, clients,^{8,9} etc. Their Stressor context is an important area of its researches. Along with study related, main stressors among its students are being home

away, strained relationship, ragging, illness of relative and self and financial issue.¹⁴⁻¹⁶ Stress affects academic/ performance,¹⁷ and also can result into reactive states, disorders and complications like violence and suicide.¹⁴

Stress and its Effects

People perceive, handle and cope with stress in different ways. Accordingly, stress has both bad and good effects. Healthy and appropriate approaches prove stress an opportunity to learn to better tackle similar situations in future. Unhealthy, inappropriate approaches and overwhelming stresses at times result into adverse physical, mental and social consequences. Alcohol or other substance use during stress is age-old risky practice. It impairs judgment and escalates impulsivity, possibly precipitating even suicidal behaviors.

Our mind concurrently operates with various unconscious psychological mechanisms to tackle inner subjective conflict or stressful situation. These unconscious mental processes are called 'defense mechanisms'. People might unconsciously react in unhealthy manner, even with 'psychotic mechanisms', e.g. behave in childish manner (regression), blame others for the condition (projection) or deny the situation itself (denial) and with 'immature' 'neurotic mechanisms', e.g. deny true feeling (isolation), behave in just opposite manner (reaction formation), console the self by giving one or other justifications (rationalization).

Healthy mind usually approaches the stress with 'mature' ego defense mechanisms such as: consciously forgetting the distressing issue (suppression), turning infantile wishes into some socially acceptable creative forms like writing (sublimation), foresee and act accordingly (anticipation), helping people in need

(asceticism) and humor. Majority of people facing a stressful situation cope well. They learn the lesson to tackle similar situations in future more effectively, comfortably and healthily. Such experiences help enhance person's capacity and empowerment.

Stress ensues with a variety of psycho-physiological changes, e.g. cognitive, emotional, behavioral, physiological, etc. A cascade of physiological responses involving various hormones, neurotransmitters and Cortisol and organ-systems ensues with stress, at times leading to reduction of immunity making person prone to various diseases, including infections. Stressed people may neglect basic needs (e.g. food, water, sleep, rest, deep breaths, exercise, relationship etc.), physical health, and health advices/ strategies (e.g. medicine) and suffer from psychological distress and mental illness. Various factors determine the development of psychiatric disorders in such stressful situations, e.g. severity, extent, persistence, duration, pervasiveness, proximity of person to stressor, psycho-physiological resilience, social support network, individual's way of looking and coping with the stress, etc. Children, elders, women, disabled and ill people are particularly vulnerable to the stress and its ill effects.

The main reason of the WHO's projection of the rise of burden of mental illness (from 12% to 15% by 2020 AD) has been pointed out to be the increasing conflict and violence. Among the major causes of human morbidity; violence, conflict and murder have been projected to rise from the 16th to 8th position. All are concerned about overt loss of material and life in such stressful situations/ conflicts. More enormous suffering is, however bound to be from mental trauma, agony and ailments.

Stress and Mental illness

Studies show a greater prevalence of overall and most of specific psychiatric disorders among the people in stressful situations.¹ Similarly, the course, outcome and prognosis of mental disorders are greatly influenced by status of their stressors. The stressors might play a role directly or indirectly as predisposing, precipitating or perpetuating factor in onset, course and outcome of psychiatric disorders.

For some psychiatric disorders, a stressor acts as direct seed or clear etiological factor (not only predisposing or precipitating or perpetuating). These are referred to as 'stress related disorders'. In absence of stressor, these disorders will not develop whereas other mental illnesses might. These three 'stress related disorders' are: Acute Stress Reaction, Adjustment Disorder/ problem and Post Traumatic Stress Disorder. Some disorders are precipitated by stressors, e.g. Acute and Transient Psychotic Disorder (ATPD) and Dissociation Conversion Disorder.

When remitted patients are stressed; their sleep might be disturbed, medication not available, skipped and disrupted, and many patients get relapsed and exacerbated. Similar finding was seen among our patients with stressors, like: armed conflict,⁴ 2015 earth-quake,¹⁰ and current COVID-19 pandemic.^{8,9} During such stressful period, many of them experience anxiety, disturbed sleep and appetite, worry, ruminations, mood and emotional changes, delusions, hallucinations, alcohol and other substance use, suicidal idea and impulses. Bipolar affective and depressive disorders are among the most common disorders in these patients. Psychosis, Anxiety, Somatoform and many other neurotic spectrum, Substance use

(Alcohol, smoking), Stress related disorders (Acute stress reaction, Post traumatic stress disorder, Adjustment disorder); Dissociation conversion and other psychiatric disorders are other problems. Many of our patients, mainly females, who sought help for problem drinking started drinking while in stress.¹⁸ Personality traits and disorders are accentuated during stressful periods.

Some of these patients show even suicidal/ deliberate self harm behavior. Majority of our suicide attempt cases report some preceding stressors, major stressors being: strained interpersonal relationship, ill health and easy access to suicide means during periods of distress.¹⁹ Hence, close relatives should remain alert to warning signs of suicide during stress.

Stress management

Stress and stressors are parts of life. Managing stress is only a way ahead all the time, whether during usual day-to-day living or such a stressful period of COVID-19 pandemic lockdown. Four Noble truths highlighted by Lord Buddha are actually a way of looking into, understanding and addressing the stress for not only living but for real inner progress in life.²⁰ Modern psychology and psychiatry put efforts, similarly, to looking into, understanding and addressing stress for prevention, treatment and rehabilitation of mental disorders. Hence, stress management is an integral component of self care of students,¹³ teachers, professionals¹¹ and all,^{8,9} and other stakeholders of our institute too.

Recognizing the 'Signs of over stress'

People might react with various sets of physical and psychological symptoms during stress, e.g. with prominence of cardiac (e.g. palpitations in 'cardiac reactors'), skin manifestations (e.g. face flush in 'skin reactors') and gastro-intestinal

symptoms (e.g. stomach problems in ‘gastro-reactors’).¹ Some common symptoms of over stress are: Tiredness/ exhaustion, Tight muscles, Nervousness, Stomach problems, changes in appetite and bowel habits, and General body complaints, e.g. weakness, headache, back pain.

Coping skills

The realization that the suffering, tension, stress or problem is part and parcel of life and world, and will vanish with time would comfort the view towards them.²⁰ To consciously and courageously analyze stressor situation and to look for problem solving strategies are basis of stress management. Stressors or problems can basically be classified into 2 categories for current context, place and time of an individual: modifiable and non-modifiable. The ways to cope with the stressors may be either: healthy/ appropriate or unhealthy/ inappropriate. With healthy or appropriate strategies, an individual develops and grows further. Stress situation, hence may prove to be an opportunity for a person to enhance management skills.¹

The coping strategies are basically of 2 types:

1. Active coping methods are directed at altering the situation to reduce or eliminate threat or danger, e.g. problem solving and for that use of social support. Modifiable stressors or situations should be tackled with these methods as far as possible.
2. Palliative/ Emotion based or focused coping strategies help regulate one’s emotional experience, e.g. Relaxation techniques. Denial, avoidance, minimization, positive reinterpretation and distancing lessen the stress for a short term. Some of the strategies are counter-intuitive, e.g. people may blame others or assume responsibility to increase perceived control. Healthy coping strategy to

choose among these methods is of great importance when the stressor is non-modifiable, excessive or out of own’s control.

Keeping ‘Stress Diary’, a useful strategy-

It helps one to calm down, be organized and analyze the problem, i.e. to define and typify the stressor whether modifiable or not, so that one can effectively utilize appropriate strategies.²¹

The Diary may note following points:

1. Situation,
2. How it made one feel physically,
3. How one felt mentally,
4. How did one react to the situation?
5. What did one say to oneself about the situation?

Problem solving: a vital strategy

This strategy is parallel to the Four Noble Truths enunciated by Lord Buddha. For a modifiable problem, one should strive to resolve it as far as possible. One should take it as responsibility to proceed further. While solving such modifiable/ solvable problems, the following steps are useful:¹

1. Get relaxed and motivated in some useful way, e.g. Prayer, Imagery (imagine some calming scenes like: garden, river, hillside)
2. Identify and define the problem at hand- begin with simple one; and one at a time.
3. Explore as many options of solutions to a problem as possible.
4. Analyze the pros and cons (e.g. benefits and disadvantages) of each option.
5. Select the best option suitable for own’s time, place, resources and circumstance.
6. Plan, execute and evaluate the outcome of the strategy. If successful, proceed further. If the option does not work, try with the other best option.

Emotion based coping strategies

These methods are useful for non-modifiable problem, when situation is out of one's control, beyond resources or capacity or when stress is excessive, and to augment the stress management process.²² They help reduce over brooding, rumination, i.e. distress. Some useful emotion based approaches are:

1. Positive perspective (explore better solutions and be grateful for not being worse)
2. Simple, practical and fruitful strategies, e.g. exercise, activity schedule (including hobby, entertaining, creative, relaxing activities)
3. Extend/enhance Social network and support system, but avoid excessive dependence
4. Relaxation techniques, e.g. deep breathing exercise, Jacobson's progressive muscle relaxation, Yoga, meditation.

Deep breathing exercise, for relaxation²³

Deep breathing exercise focuses on the regulation of respiration, i.e. breathe in-and-out cycle. This can be done anytime, anywhere, in any body position (e.g. while getting up, going to bed, during work interval). This simple short method should be regularly done at least for some period to experience its positive effect.

In a calm and disturbance-free place, one can invite state of relaxation from head to toe by imagery or similar method to start this process. In a relaxed comfortable position, with closed eyes and focus of attention into the breathing; start 'Breath in- 2- 3' in the rhythm of a second for each mental count. Then, breathe out- 2- 3. It makes a respiratory rate of 10 cycles a minute. One can do this for 5 minutes or so at a time, though it can be modified as per convenience.

COPE inventory scale

It assesses the coping strategies adopted by an individual. Five of 14 scales, each scale

containing 4 items except for 1 (53 in total) (i.e. Active coping, Planning, Suppression of competing activities, Seeking of instrumental social support and Restraint coping) measure the problem focused coping. Five other scales (i.e. Seeking of emotional social support, Positive reinterpretation, Acceptance, Denial, Turning to religion) measure the emotional focused coping and three other scales (i.e. Focus on and venting of emotions, Behavioral disengagement, Mental disengagement) measure coping responses with arguable usefulness.²⁴

Strategies to Manage Stress in our Life-

Some of the useful strategies for day-to-day stressors could include:

- Simplify one's life and relationship
- Problem solving as far as possible
- Activity scheduling and Time Management
- Creative activity- writing e.g. stories, articles, Diary, singing etc.
- Pay attention to Basic needs, e.g. Adequate Sleep, plenty of fluids
- Humor- Take Time to Play
- Prayer and seek connection with life aim
- Learn Assertiveness skills
- Minimize Alcohol/ substance Use and addictive behaviors, e.g. internet/ sex
- Relaxation Techniques
- Ask for help and get Counseling in need

COVID-19 Stress management

With these stress management strategies, current pandemic demands for certain strategies, like: avoiding too much media updates, over-indulgence in internet based activities, substances, inactivity; paying due attention to nutrition and fluids, exercises, hand hygiene, sanitation, boosting immunity and social interaction maintaining physical/ social distancing.^{25,26,27}

CBT components/ strategies

For management of mental disorders like psychosomatic disorders too, 5 stress management skills are very useful, i.e. self observation, cognitive restructuring, relaxation training, time management and problem solving.¹

Stress management, hence should be an essential component of curriculum of all levels and fields of learning, education and training. Stress management skills are required even more for COVID generation human beings.

Useful links for stress management materials

1. WHO. Doing What Matters in Times of Stress. <http://www.who.int/publications-detail/9789240003927>
2. WHO. Mental health and COVID-19. <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov-technical-guidance/coronavirus-disease-covid-19-outbreak-technical-guidance-europe/mental-health-and-covid-19>
3. Ministry of Health and Population, Nepal. Coronavirus disease (COVID-19) outbreak: Updates and Resource materials. https://heoc.mohp.gov.np/recent_alert/update-on-novel-corona-virus-2019_ncov/

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