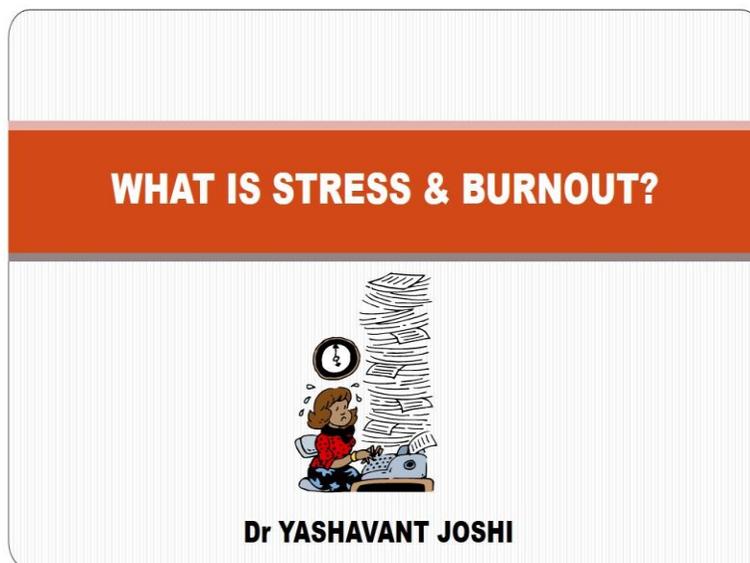


Basic Certificate in Palliative Care
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Week-05
Lecture 02: What is Stress and Burnout

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Week number 5 and lecture number 2. Hello friends, welcome to week number 5 and during this week we will be generally discussing about stress and burnout management. So, in our first lecture let us define stress and burnout and thereafter we will go ahead.

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PART: I WHAT IS STRESS?



First part is what is stress?

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What is Stress?

Merriam-Webster Online

1. A force exerted when one body or body part presses on, pulls on, pushes against, or tends to compress or twist another body or body part; *especially* :
 - ❑ The intensity of this mutual force commonly expressed in pounds per square inch
 - ❑ The deformation caused in a body by such a force
2. A physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation called Stress. Stress a state of bodily or mental tension resulting from factors that tend to alter an existent equilibrium
3. The force exerted between teeth of the upper and lower jaws during mastication

Now, stress all of us generally we have almost all of us starting with a child to an elderly person we have certain types of stress. We call it stress scientifically otherwise normal people they say tension. Life is not tension free at all.

So, let us see what is stress as per dictionary. A force exerted when one body or body part presses on, pulls on, pushes against or tends to compress or twist another body or body part especially the intensity of this mutual force commonly expressed in pounds per square inch. The deformation caused in a body by such a force that is also called stress.

A physical, chemical or emotional factor that causes bodily or mental tension and may be a factor in disease causation called stress. Stress a state of, a state of bodily or mental tension resulting from factors that tend to alter an existing equilibrium. The force exerted between teeth of the upper and lower jaws during mastication that is when you are chewing some sort of force is being applied that is also called a stress. This is the general definition what dictionary people are talking about. We are basically now in this part of our course that is the basic certificate in palliative care.

We are related with this the forces exerted on us physical and emotional factors on our body.

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WHAT IS STRESS?

- Stress is a response called the General Adaptation Syndrome (Hans Selye 1956).
- Stress can also be defined as a failure to adopt; it occurs when the environmental or internal demands exceed an individual's resources to adopt (Lazarus & Launier, 1978).
- Stress may be an internal state which can be caused by physical demands on the body or by environmental or social situations which are evaluated as potentially harmful and uncontrollable. (Morgan 1993)

Another normal scientific definitions which people have given out Hans Selye in 1956. He said stress is a response called the general adaptation syndrome. On one side we have got demands and to meet the demands we have got certain resources. When demands are

increasing we are supposed to increase the resources, but it does not happen we cannot go beyond a particular limit like our monthly income is about 30000 rupees.

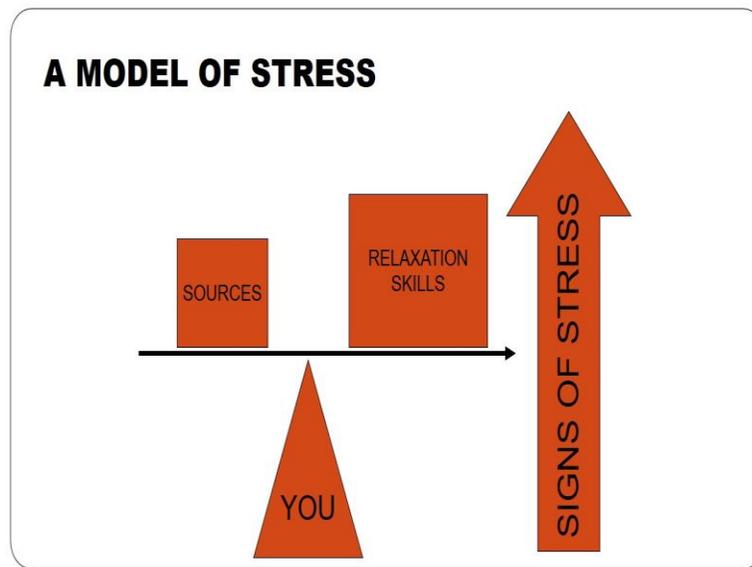
That means, whatever demand we have from family side should not exceed 30000 rupees per month that includes food, shelter, education, petrol everything. If petrol goes costly monthly expenditure increases, but the pay stagnant time into say does not increase that way. It increases gradually and generally annually, but demands are increasing because of inflation and other things. Children are growing up earlier they were in primary school, then high school, and college fees are going up. So, how do we end up to this? When demands are increasing we need to increase our resources.

If possible then your wife will also start working so that your income will increase, but in normal circumstances this does not happen. So, here what happens you there is a demand for more money and income is less. So, that will be called economic stress. It is a stress regarding shortage of money, but mind you my dear friends after 1 or 2 months this stress will be transferred to psychological stress. Now, the family and particularly the parents are thinking about it what to do, what to do, what to do and they do not find any path from where they can get the money and money does not grow on the trees otherwise we can just climb up the trees and take out the money, but it is not possible it is difficult to adopt.

This is one question another anywhere situation changes every situation is different. Luckily we human being are adaptable to different types of situation, but sometimes we do not adapt and then what happens tension stress. So, this particular stress and Selye said it is a general adaptation syndrome, stress comes up when when we are unable to adapt to the present situation. Stress can also be defined a failure to adopt, it occurs when the environmental or internal demands exceed an individual's resources to adapt Lazarus and Launier, 1978. Stress may be an internal state which can be caused by physical demands on the body or by environmental or social situation which are evaluated at potentially harmful and uncontrollable.

Social situations also, daughter is supposed to get married. Now, in your society normally average person spends about 10 lakh rupees. What do you do when you do not have 10 lakh rupees? So, that is again a social situation which demands a particular expenditure on marriage ceremony, but you do not have at all. So, there is so many factors social, economic, environmental, educational, professional where demands are rising, but the resources to, resources to cope up with this demands are not rising and that is where the stress comes up. These are some of the definitions which have been given out by scientist.

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Now, I just give you a model of stress very simple model. One side it is you, you are here, you have got certain sources, you have got certain relaxation skills also. Now, it is basically between these two how you balance these sources or demands. So, how do you meet these demands? If you meet these demands, then you are a balanced personality, but sometimes it is not possible to balance. Then the demands from all these stressful sources goes up relaxation skills whatever you have come down and therefore, sign of stress goes up.

In a different way, if you have got more relaxation skills, more resources to meet the demands, then stress decreases and it decreases to this level where you find lots of

happiness. Oh my god, life is tension free, life is just tension free you know. So, basically it is a tussle between demands and resources, demands and certain relaxation skills what you have and the management of those these two depends what and how you manage can be a cause of stress.

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FACTORS INVOLVED IN STRESS

Stress is caused by interaction between situational, personal and biological factors. The general effects of situational variations include:

1. **Duration**
2. **Severity**
3. **Predictability**
4. **Controllability**
5. **Suddenness of Onset**



Now, which are the forces involved in stress.

Stress is caused by interaction between situational, personal, biological factors and the general effect of situation varies include firstly duration. If you experience a particular stress for longer duration, the intensity of stress is more. If it comes and goes, there is no problem. Severity, what sort of stress is there? It is so severe like somebody falls sick, he needs immediate hospitalization. Medical expenses increases to 5 lakh, 10 lakh rupees like that you know.

Severe, how to manage? Where to generate such a huge amount and particularly for a middle class family to generate rupees 10 lakh is just impossible. Predict, predictability, if something is predictable, yes we can do some sort of savings and that is what we do in India. Most of the people they do say my mother used to tell me, whatever you want 10 percent it should be used for seva, service, donation. 20 percent to be saved for future

contingencies, this is we call it unpredictable as well as predictable situation and the the balance 70 percent to be used for monthly expenditure. So, now the 20 percent what you are saving in your banks is for unpredictable situation as well as predictable situation and what are the predictable situation? It is educational phase, you want to build or buy a new home and may be certain retirement securities, it includes the marriages of the children because marriage in our society in India, it is a very huge ceremony.

People take pride and therefore, these are the eventualities, these are the predictable things. Home, education of children and marriage of children, these three things are always predictable because this is what we require and therefore, we need to save the money. Controllability, most of the factors are not within our control. Home you need, of course you may not buy a huge bungalow of 1 crores or 2 crores, but you need a home, you need money. Education is getting expensive day by day.

Similarly, some hospitalization yes, marriage is again year by year they will go expensive. You may not believe in the or a system this or that, but certain social expenditure have to occur. So, most of the things are uncontrollable, I mean to say some minimum amount you have to do and suddenness of onset. Suddenness, I mean to say all of a sudden certain things come up. Whatever has been predictable like education, buying of home, marriages of children predictable because it depends as per the age you know that is what we plan, but sickness and terrible sickness what do you do? It comes all of a sudden.

So, these five factors when they get involved in that demand from outside, our stress increases.

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Stress: Fight or Flight – 1915



WALTER BRADFORD CANNON,
M.D.

- **Bodily Changes in Pain, Hunger, Fear and Rage: An Account of Recent Researches into the Function of Emotional Excitement**
- **Concept:** Animals react to threat by a discharge in the nervous system

In 1915, fine and this is one of the earliest definition and it is basically based upon our ancient state of affairs of human beings when we are staying in jungles. Thousands of years back we are not civilized in the sense that the way we are staying in houses and we have got lots of traffics and educations and other things, those things were not there. There was not even a proper society also they used to stay in jungles and jungles I mean to say there were so many wild animals. So, what do they do? Either they used to fight against the wild animals, otherwise to just they used to carry off from there, flight, run away.

So, this particular thing was there earlier and it is still inbuilt in our minds either fight or flight. This was given by Cannon. Bodily changes in pain, hunger, fear and rage and account of recent researches into the function of emotional excitement. When a man gets emotionally excited, he finds so many bodily changes. Pain increases, hunger increases, fear, rage and this was the concept basically we got it from animals react to threat by a discharge in the nervous system.

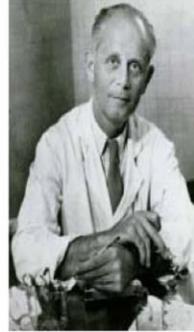
And this is what we are doing actually in earlier stages, thousands of years back.

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Stress: General Adaptation Syndrome – 1936

- **General Adaptation Syndrome**, a response of the body to demands placed upon it. The Syndrome details how stress induces hormonal autonomic responses and, over time, these hormonal changes can lead to ulcers, high blood pressure, arteriosclerosis, arthritis, kidney disease, and allergic reactions.

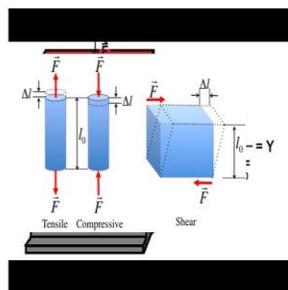
HANS SELYE



So, general adaptations syndrome, a response of the body to demands placed upon it. The syndrome details how stress induces hormonal autonomic responses and over time these hormonal changes can lead to ulcers, high blood pressures, arteriosclerosis, arthritis, kidney disease, and allergic reactions.

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Stress... in the 21st Century



a force exerted when one body or body part presses on, pulls on, pushes against, or tends to compress or twist another body or body part



DOCTOR I'M TIRED ALL THE TIME

Stress in the 21st century, correction century, this is where the patient say doctor I am tired all the time. Similarly, doctor is also tired sitting in the chair.

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STRESS!

“Complete freedom from stress is death. Contrary to public opinion, we must not-and indeed cannot avoid stress, but we can meet it efficiently and enjoy it by learning more about its mechanism and adjusting our philosophy of life accordingly.”

Stress, a question might come to you, can we become tension free, can we become stress free? Yes, you can become stress free or in fact, all of us become stress free when we die. When we die, there is just no tension at all. Tension is there amongst our relatives or friends, they weep, they cry and they go through the process of bereavement and grief, but otherwise the person who is dead, there is just no tension at all. Contrary to public opinion, we must not and indeed cannot avoid stress. Stress will be there, but we can meet it efficiently and enjoy it by learning more about its mechanism and adjusting our philosophy of life accordingly. This is what we are doing now.

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Stress: Seen & Unseen

BRAIN

THE STRESS SYSTEM

- Hypothalamic-Pituitary-Adrenal Axis
 - Increased blood pressure
 - Increased heart rate
 - Pain and discomfort
 - Anxiety
 - And on and on...

- Mental Activity Can Lead to Changes in the Brain
 - Dendritic remodeling and stress exposure
 - The Hippocampus
 - Memory impairment?
 - The Pre-Frontal Cortex
 - Executive functioning?
 - The Amygdala
 - Anxiety and hypertrophy
 - More to be learned about the adolescent brain

Stress by the way, let me tell you, there is a positive stress also and there is a negative stress also. Positive stress it pulls you upward. In our language, it is called Eustress and negative stress which pulls you downwards and creates psychological distress that is called distress. What is positive stress? Eustress, a child has to appear in standard 10 exam and this is the first time that he is going to appear for a board exam. So, he is really concerned how much to study, how much marks he will be able to score, whether after 10th he will be able to take science subjects or humanities subjects or commerce subjects.

This is all, there are so many questions nowadays which a child has to face. So, this generates sort of stress, but this stress is positive. If this stress is not there, the child will not study further. He will not take interest in the studies because of this particular stress that he has to do well if he wants to go up in his life, he wants to acquire a good job or if he wants to start a new business, if he wants to become a doctor or engineer, he has to undergo this particular stress. So, this is, so if he wants to go upwards in his life, he has to undergo certain stress and that is Eustress.

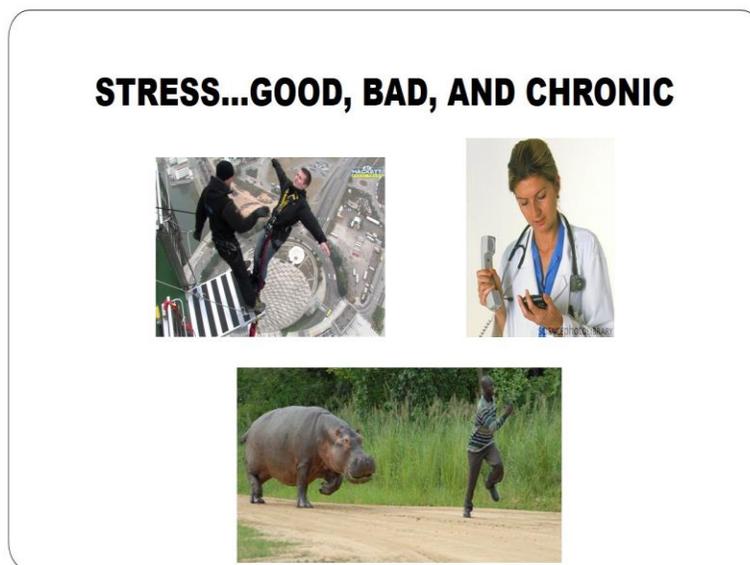
This is the many factors. A father has to work very hard, he has to work very hard because he has to meet the demands of the family, resources need to be increased. So, this is again Eustress. This stress is very important for the developmental stage of our life, but other stresses are not good and they are distress. Now, let us see certain stresses can be seen and certain stresses cannot be unseen. The stress system, hypothalamic

pituitary adrenal axis, here you get increased blood pressure, increased heart rate, pain and discomfort, anxiety and on and on, there are so many, so many of them.

You have gone for a picnic somewhere nearby jungle and automatically sometimes you know you just wander into jungle and then thereafter you find a wild animal and he is running towards you and just see what will happen. Fight or flight syndrome, you cannot fight against maybe a tiger or maybe a lion or maybe anything, something bigger than you. So, you run, you. Run to save your life from that animal and that is where a stress system, your whole body comes under stress, biological, chemical and this whole things happen into your body. Blood pressure increases, heart rate increases, you feel pain, lots of discomfort because you are running very fast, anxiety you do not know whether you will be saved or not.

Similarly in brain also certain mental activity can lead to changes in the brain, dendritic remodeling and stress exposure, the hippocampus, memory impairment, the prefrontal cortex, executive functioning, the amygdala, anxiety and hypertrophy more to be learned about the adolescent brain also.

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Stress, good, bad and chronic. Tell me out of this. Number one, let us see number, this is one, this is number two and number three. Let us take number one, there is the sky, free dropping, you can see the things down below.

What sort of stress is this? They are under stress, but this is good stress because they are doing it, they enjoy such adventurous activities. They want to do it more and more, it is a matter of thrill for them, it is risky, but they have taken this particular risk because they get lots of fun and enjoyment out of it. Now come to number three, this a chap in jungle, rhino is just running behind him. So what sort of stress is this? He is not enjoying, he wants to save his life. All of a sudden, he just went in there inadvertently and rhino came across and the person is just running away.

So this is a bad stress. And now number three, this is chronic and most of us generally remain busy in mobile. Mobile or cell you call it, very good. Easy transfer of message is sometimes very, I mean it is handy also, easily rechargeable and thanks to reliance, very very cheap.

Let me tell you, it is the cheapest mobile communication what we have in India. It is good, but it has produced now chronic stress. People are busy while walking on the road, while driving, they are making use of mobiles and lots of accidents take place. And just people cannot live it, it has become chronic.

The number of cases have happened when parents say something to adolescent children, please do not use mobiles, they snatch away the mobiles, children have committed suicide also. It is a chronic stress which we should try and avoid, but people do not avoid. So here the simple pictures showing you, explaining you what is a good stress, what is a bad stress and what is a chronic stress.

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CHRONIC STRESS!



Chronic stress and smartphones and tablets and any mobile devices, they can become a chronic stress.

You cannot live without them. You can live without food, you can live without sleep, but you cannot live without mobiles.

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HISTORY

Year	Researcher	Event
1966	Donabedian	Quality of services is directly related to work satisfaction
1970	McGrath	Defined the term " work stress "
1974	Freudenberger	Talks of " work disease " and " burnout syndrome " which he found more frequent in healing professionals
1982	Maslach	Defined " burnout syndrome " by 3 characteristics—known as the Maslach Burnout Inventory (MBI) and is considered the gold standard: <ul style="list-style-type: none">• Emotional exhaustion• Depersonalization• Lack of personal fulfillment

From: Constance Ange. Clinician burnout in Contemporary Medicine

Let us study the history so that we understand what is stress in detail. In 1966, Donabedian, he said quality of services is directly related to work satisfaction. If you provide good services, you will have good output.

In 1970, McGrath said define the term work stress. Stresses are like educational stress. Even wife at home, she is also stressed because she does lot of work. She in fact, she is a home manager and that manager is doing everything. She is the chef, cooking, cleaning the utensils. She is a washer woman, she washes the clothes plus iron them also.

She is a housekeeper, she cleans, she mops the whole house, makes the beds and everything. She does all sort of payments, electricity bills, TV bill, this and that, you know, she is an accountant. So, that is a stress what a wife undergoes. Similarly, the working people, they go under a stress in their factories or offices that is called work stress. In 1974, Freudenberger talks of work disease and burnout syndrome which we found more frequent in healing professionals.

After this stress, stress is a higher state when you go up and a prolonged stress that becomes burnout. 1982, Maslach's defined burnout syndrome by three characteristics known as Maslach Burnout Inventory, MBI and is considered the gold standard. Emotional exhaustion, depersonalization means what? We have become mechanic people. There is no personal affinity between us. We do not consider each other as a human being, as a part of society.

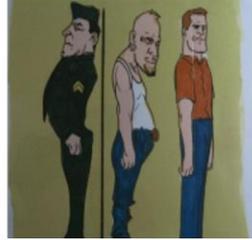
We are working just mechanically. We do our work by clock. The way those needles move around, we also give the output. We generally do our work just like a machine. So, by doing such work, we have depersonalized ourselves. We do not have any emotional and social feeling with other people.

Lack of personal fulfillment, you want to do something, but you cannot do it, you know, because you have to do a job also, you have to look after your family also. There is no time, there is no money to look or to go for your hobbies.

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TYPES OF STRESSFUL SITUATIONS

1. Catastrophes
(Natural or Manmade)
2. Major Life Changes
3. Work Fatigue
4. Chronic Life Strains
5. Hassles



Types of stressful situation, it can be any catastrophes, natural and manmade. Natural we know, some jungle fire, some earthquake, tsunami, all this is all natural and manmade basically war, Ukraine Russians war. And now what is going on this year in 2023 is October 2023 Israeli and Hamas.

We have, who has created, God has not created it, we have created it. They are all manmade. Major life changes, you go to a college, you go to a hostel, you get a job, you get married. After marriage you get children, you shift a new house, so many things. You change your city, residence place, you are staying in city like Mumbai and then go to Kolkata or Delhi or something like that, complete transfer, work fatigue.

Earlier the people used to work for 6 hours and 8 hours and now you do not have time. Everybody is working 10 hours, 10-12 hours and if you include the periods of travel to and fro, it will be much more. Chronic life strains, first major chronic life strain is meeting the demands. Resources are less and demands are increasing day by day. And small hassles, you go to bus stand and bus stand is gone.

You go down, you want to go, you are going on a two wheeler to your factory and when you go down, you just see that it is punctured. In the house also gas is gone, gas is, cooking gas is exhausted. So, small things keep coming and they will keep coming, they will keep coming. So, these hassles come, stress increases.

These three gentlemen, they have got their own stress.

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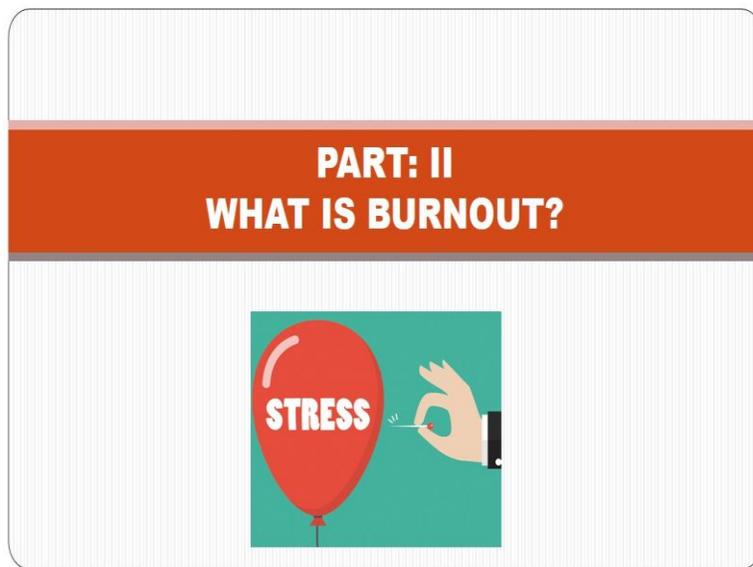
Change in Location	Becoming a Parent
Families and Children	Caring for the Elderly
Mid-Life Crisis	Menopause/Andropause
Separation and Divorce	Extramarital Affairs
Adolescent Children	Examination Stress
Bereavement and Loss	Premenstrual Syndrome
Financial Difficulties	Work Stress
Speaking in Public	Life Without Work

General sources of stress, change in location, families and children, mid-life crisis. What is the mid-life crisis? It can be any. Children, they are grown up, they are into the job, some of them they have to get married, they also need a house, you need a house and slowly and slowly you are also getting basically aged. Separation and divorce, adolescent children, bereavement and loss, financial difficulties, speaking in public. Some sources say that in America people, they are not afraid of death but they are afraid of speaking in public.

Americans I am talking about, USA. So, the same thing is here in India too. Becoming a parent, again it is a joy also but at the same time we do not know. There are certain subjects, certain subjects are not being taught. We do graduation, post-graduation, we do PhD and so many things, but certain subjects which are required, they are not being taught. How to communicate, how to look after yourself, self-care, how to find a girl in marriage, what a girl or boy should do after marriage, what should you do when you become a parent first time.

So, the simple subjects of course, we know because we keep seeing it and from our observation and sometimes our elders are talking, so we know it, but systematically if you study these subjects, I personally feel it will be very helpful to you. Caring for the elderly, menopause, andropause, extra marital affairs, examination stress, premenstrual syndrome, this is for the small child girl, work stress. Work stress is there and equally important is life without work. There is no work at all, what will you do? And this happens particularly after retirement.

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Part 2, what is burnout? Stress all of a sudden what happens when you blow the balloon so much, put so much of air into it, but time comes when it blows out. Otherwise also when you put a pin, again it just get burst out. Similarly, burnout is also the same thing when stress becomes uncontrolled because you have not managed it and for a long long time, prolonged duration, you undergo stress, then the time come that it is in a situation where it is going to be burnout totally. You are of no use after that.

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BURNOUT...



“Physical, emotional and mental exhaustion caused by long term involvement in emotionally demanding situations”

And then you keep crying help, help, help, you are in a heap of such stress related work and pressures that neither you can come out nor anybody is going to help you out. What is burnout? Physical, emotional and mental. So, three things from all the three directions, there is pressure on to you.

Physical, emotional and mental absorption caused by long term involvement, long term I am saying and when long term comes, it is generally 5 years and more. Long term involvement in emotionally demanding situation, emotionally demanding situation I mean to say there is a pressure that you got to fulfill those things, but you are unable to fulfill. Your son is very brilliant, you have put him in a good college, emotionally you know that you want to, you want him to study in that college, fees a very high, demand is there which you cannot afford, but what do you do?

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BURNOUT

**What is happening to
doctors?**



“Life is never made unbearable by circumstances, but only by lack of meaning and purpose.”

_Viktor Frankl

Life is never made unbearable by circumstances, but only by lack of meaning and purpose. Viktor Frankl, yes sometimes we do not have meaning and purpose. Of course, this is something where is like talking like a spiritual person because for a normal man, what is the purpose of life for a normal man, for a middle man? What is the purpose of life? He is not a son, he is not a guru or something.

He does not want to achieve nirvan. He has got a wife, he has got family and his normal purpose in his life is just to earn some money, give good education to child, so that he studies and goes up further in his life. You know this is normal purpose. And when he is trying to fulfill this small, small purposes, naturally he has to encounter so many difficulties and he comes under stress. He knows the higher purpose of life that meaning he knows, but he is unable to accommodate that particular meaning in his present day life. What can he do? He got married, got wife, got children and started going into the rut of social demands.

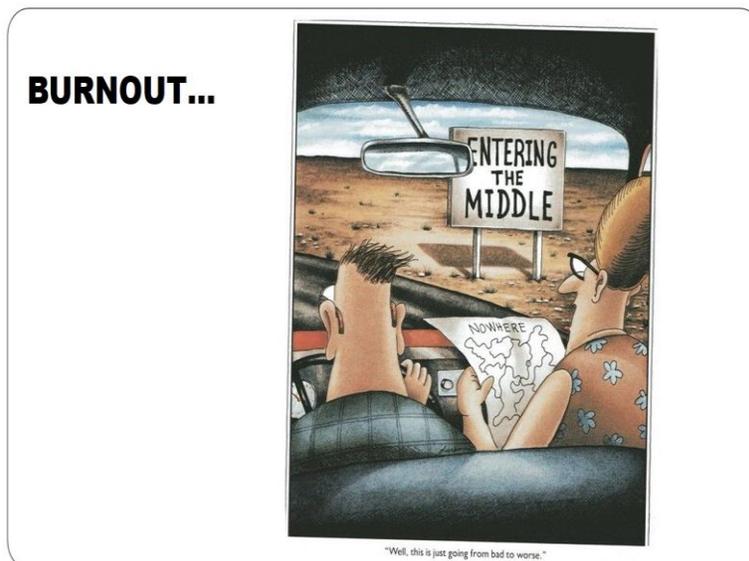
So, he just cannot do anything. Stress and stress and stress and finally burn out.

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Upside stress and this is the burnout where snow is melting down.

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Burnout, well this is just going from bad to worse. Entering the middle, he does not know where he is going.

So, this is actually happening. Some of the stresses we know that the situations are stressful, but really humankind, human beings, people are unable to pull them out. Social demands, emotional demands.

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BURNOUT



- 1. Role Overload:** expectations of others exceed one's ability to perform
- 2. Role Conflict:** forced to make a choice about which demand to satisfy. Example: ex) child's soccer game vs. staying late to see patient or complete paperwork

Burnout, role overload, expectations of others exceed one's ability to perform. This normally happens in office environment where your boss thinks that you should perform more and more.

There are certain targets, monthly targets you must meet and then role conflict, forced to make a choice about which demand to satisfy. Child soccer game versus staying late to see patient or a complete paper work. This is for a doctor whether he stage he gives more time in a clinic or he goes out and see the child playing some sports in his school. It is a role conflict whether he wants to become a good father or doctor.

Role conflict and role conflict is happening every time. We always talk about life and work balance. I tell you my dear friends everybody wants to balance, balance the life with the work environment. But sometimes it is just not possible because there are demands, lots of demands on his work environment in his office.

His boss is there pressurizing to produce more and more hours, to sell more and more. He knows that I must spend more time with my children. They are studying. But again it is just not possible. So, this is just the initial brief of stress and burnout and in our other lectures we will get into the detail. Thank you friends.