

**Human Adjustment Processes**  
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**Module - 6**  
**Lecture - 4**  
**Emotions and Adjustment**

To deliberate with respect to emotions where our primary focus would be on the impact of emotion and emotional appraisal on the health of an individual when we talk of health, we referring to both the physiological health the physical health and the mental health both.

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### Emotions and Health

- Health as state of complete physical, mental, and social well-being
  - World Health Organization
- Besides playing key role in the adjustment process, emotions are also found to affect our health
- Several culture (Indian, China & Greek) have explained health in terms of balance with the nature
- This balance or harmony incorporates equilibrium among the physiological, psychological, and social well-being

But before we do that we just have definition of health by the world health organization the WHO, which says that no health is basically complete physical mental and social well being. Now, the interesting part of the definition of health is that you do not consider health to be exclusively physical or mental in nature, but the social well being has also been attached to the definition. And this know broadest the horizon of health like anything, because you also have the social well being of an individual let us comes there. It has been found that besides playing an important role in the adjustment process something that we were discussing since last four days.

Emotions also affect our health in a massive way. And if you look at the ancient culture especially, I am referring here to India china and the Greek culture, which are considered to be pretty old. They have all explained health in terms of certain balance that you strike with the nature ok. So, even little later will be referring to the ayurvedic concept just will just know very cursory way we will just touch upon that, where the whole emphasis is upon the balanced that one is able to maintain with respect to the nature ok. And in case you realize that this balance or harmony, which basically demands you to a strike a balance that demands you to know maintain an equilibrium with respect to your physiology, your psychology and your social well being. If any one of them you start know having an imbalance that starts affecting the others also. So, little imbalance at the physical state you realize that psychological social well being also gets affected. Little imbalance at the psychological well being and then you realize at the physical and social well being starts getting affected. And social well being of course, know it has the heavy influence of the remaining two and vice versa.

It also influences both of them too much. How common example could be that all of you must have experienced, say if you an acute pain in your body say for example, either you have an acute pain in your stomach or though you have the whole bodying and that is acute in nature. You cannot psychologically concentrate on any other activities simply, because your pain is acute enough to drag your full attention ok.

And this intern will not allow you to get engaged any type of social activity, which was actually needed by your society at that point of time. Similarly if you are psychologically disturb you, you had terrible paper in your mid semester exam you anticipate that the grades are going to be very low you are internally very disturbed and that evening you do not feel having your meal. So, just disturbance at the psychological level starts influencing your physiological mechanism. And similarly, if somebody asks you that now, today was the last paper, we are planning to go for movie. So, why do not you join us and your social well being gets effected, you say that no more movies, no it is enough now, I am myself no seeing movie in my own life my grades are now fluctuating here and there ok.

There could be some other social phenomena, which really perturbs you. You get perturb

to the extent that you know your psychological attachment towards that very episode is to become to instance your body also reacts in a particular way say for example, the recent know December gang rape episode in Delhi for example, all those who despite the fact that it was cold winter morning despite the fact that there was presence of heavy police force despite the fact know repeated charges and water cannons were being used still many many people decided to go there ok.

They must have been somewhere perturbed by the whole way the thing had taken place. And therefore, psychologically your determined only and only to focus exclusively on that very episode. So, you leave your office you leave your other engagements it is painful to continuously stand know for so long. It is painful if in the chilled winter morning when you are having all those jackets somebody pores water on you it is difficult to managing all those things, but then you are psychologically so moved by the social cause ok. The whole disturbance that has taken place in your environment that, you do not bother about these things. You neither feels having tea, you do not feel tired, you do not feel having meals ok.

So, this is how know the social well being also know influence is the remaining two attributes know. In life finally, what the ancient cultures were initially prove know promulgating what they were advocating even the recent trend of research also says the same. That if you to have a very healthy life, if you want that the physiological state should be very very sound then you also have to strike a balance knows among the components, which are available in your nature. Because emotions are by default going to influence us psychologically, therefore it is certain that it will also influence our social well being it will also influence our physiological state of the body.

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## Emotions and Health

- Illness has been explained in terms of disequilibrium
- *Ayurveda*: Balance (equilibrium) among the three energies in our physical constitution— *Vata*, *Pitta* and *Kapha*
- Ailments (*dosha*) are explained in terms of imbalance among these three energies

I am not going to Chinese and the Greek interpretations, but if you look at our own Indian interpretation of the illness is the diseases. Illnesses it has been explained in terms of disequilibrium. Now, we were talking that the some of the ancient cultures including our own, talks about maintaining equilibrium among the components that are available in your nature ok.

Our traditional ayurvedic concept also talks about this and it explains illness in terms of the disequilibrium. According to ayurveda even has to maintain a balance that is equilibrium ok. Among the three energies in our physical constitution the vata, pitta and kapha and for ayurveda it is all about vata, pitta and kapha. And all the elements what in ayurveda they are called as dosha, the dosh. All these doshas are explained in terms of imbalance among these three energies.

So, if you have know more of vata, that is know the more of gas element in the body than it would start influencing your body in certain way, you develop certain elements. Similarly if you pitta, if you have higher release of pitta in the body that is the bile pigments know, if you have extra release of bile pigments in the body it will also adversely effective. And similarly, if you have the kapha know then it also influences you and the whole of the concept of bodily diseases according to ayurveda is actually an

imbalance that takes place between these three energies within the body ok. We are not going in to the details of the ayurvedic concept, we are just trying to understand that know emotions they do influence our well being, our physical health, our psychological health and therefore, know we are referring to some of these concepts.

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## Emotions and Health

- Models explaining illness
  - Generality model
  - Specificity model

There are two interesting models that basically explain illnesses ok. One is the generality model and the other is the specificity model ok.

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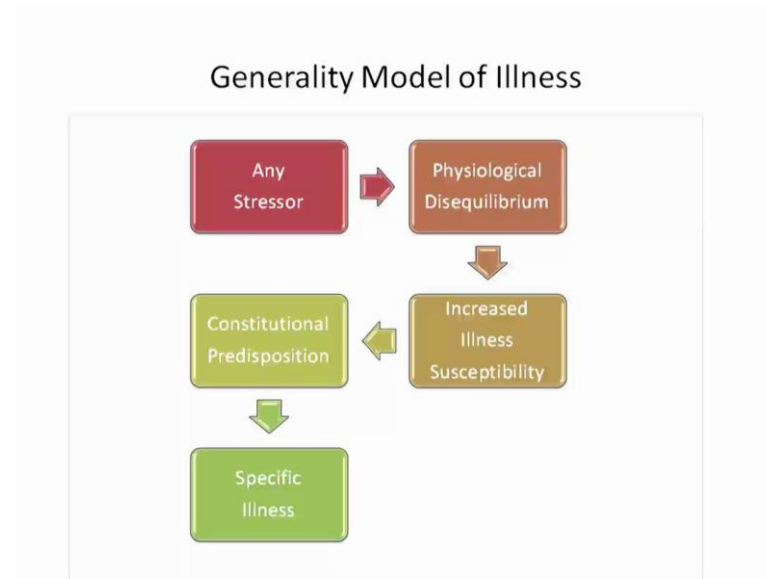
### Generality Model of Illness

- Illness in terms of disturbance of the internal equilibrium
- Susceptibility to such disturbances increases as a result of stress or emotional reaction

Now, the generality model of illness it know describes illness in terms of the disturbance of the internal equilibrium ok. So, basically you have your internal mechanism, which is in a harmony with each other and once there is no disharmony, if there is a disequilibrium between any two components know within the body than the body becomes to susceptible to illness. So, susceptibility to such disturbance increase as a result of stress or emotional reactions.

So, once you have stressful experience or once you have know some type of what we were referring to here as goal in congregant emotions they are largely going to affect your body. And it might know make your body to susceptible one or the other type of illness. Stress know just today we would completes this model, tomorrow when we begin next model there will first begin with stress. So, just in continuation we will have know exclusive discussion on a stress and there you would again see know multiple ways in which us stressful state adversely effects both our physiological system as well as a psychological functions.

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So, this the generality model, you have any stressor in your environment this stressor in turn leads to disequilibrium in the physiological mechanism. Once the physiological mechanism undergoes certain disturbance one has increased susceptibility to certain types of illnesses. The increased susceptibility towards illness, it leads to know constitutional predisposition we are in your physiological system that know becomes predisposed with one or the other type of problem.

And this know constitutional predisposition finally, leads to specific type of an illness. Let us take a one example one is under tremendous stress, because of certain reasons, reason we are not elaborating right now, it is just the fact that one is under tremendous stress. Now, this would start know disturbing the physiological functions of the body this would mean that the person know might have an increased blood pressure, the person might have know rapid, know palpitation, the person might have know increased heart rate. And therefore, the pulse rate would also increase and then you sustain all these phys increase in the physiological mechanism for a relatively longer period of time ok.

Now, if you have relatively longer exposure of this type of physiological function, which is of an increased magnitude. It know starts depleting certain other resources in the body and when some other resources in the body starts depleting this means that your body

will become more and more susceptible certain type of diseases, because your immunity being compromised with. Once your immunity gets compromised with at time would come when your vulnerability to certain type of disease maximizes and therefore, you develop specific symptoms, which later on doctors will tell you that these symptoms are indicator of these specific disease ok.

Say for example, you would realize that most of the people who had been under tremendous stress the report symptoms of peptic ulcers for example. Likewise there are know, lot of diseases which has to do with, this type of mechanism where the trigger is at a stressful experience and then finally, your body surrenders to one or the other type of physical illness ok.

Now, when we say that know stress influences know the body and it makes the body susceptible to one type of illness. Experiencing of stress would mean that you are actually experiencing goal in congruent emotions. You remember last time when we took the example of a middle aged man, who wanted his mother to talk about and act, which was otherwise an act of immorality and the whole sense of guilt was know over well being inside him. When he was first, when he come to the clinic, it was not the guilt, which had brought he, it was his physical symptoms that brought him to some other clinic from where he was referred to this place where finally, it was it is basically the un fermentable know guilt that is primary source of the problem for the integration ok. There are there are there are several, several, several such type of know diseases where you would realize that once set finally, leading to full physiological symptom, now these is the generality model of illness.



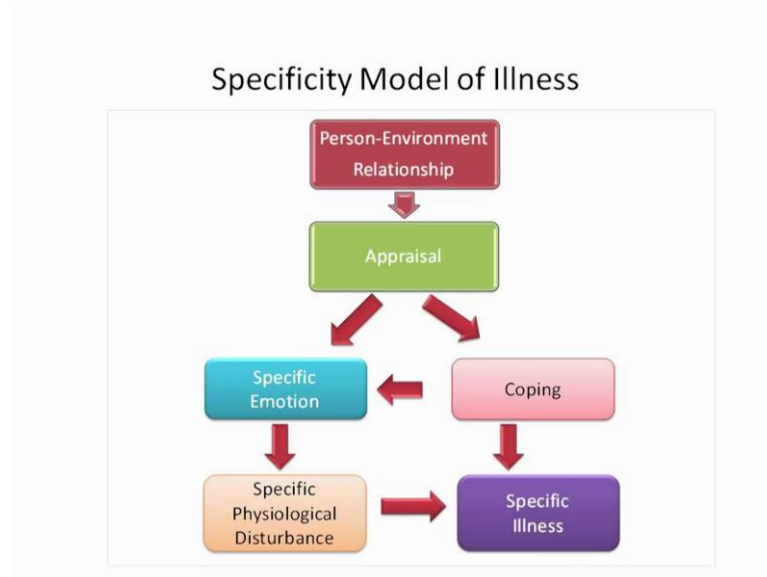
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### Specificity Model of Illness

- Emphasize upon specific agents responsible for the illness
- Conceptualizes emotion centered causal phenomena of illnesses and explains the effect of psychosocial factors on health

We now, come to the specificity model. Now, a specificity model basically emphasizes on the specific agents are responsible for one or other type of illnesses ok. It conceptualizes emotion centered casual phenomena of illness and explains the effect of psychosocial factors on health. So, basically what it does is that it considers that emotion is at the center of the whole know chain of illness and it also affect our psychosocial factors.

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Now, this is what the specificity model says, on the top you have the person environment relationship. So, again if you refer back to what we were know talking about right now, with respect to the advocacy of the ancient culture that primarily there is a balance that is needed among elements in your nature. If you are able to maintain that fine your healthy both physically and mentally your social well being is also at the best ok.

The movement you have difficulty among these factors than you will start experiencing the problem. So, if the specificity model basically says that the most important know attribute in terms of understanding illness is your relationship with your environment. Second depending on how you are relating to your environment you have the appraisal phenomena. Now, the whole of goal congregant and incongruent emotions, initially professed by at we were talking know last two days, that is comes into picture there. So, you have relationship you have appraisal mechanism and these appraisal mechanism can lead to two things. One you have a specific emotions, specific emotion means you can have one of the goal congregant emotion or you can have one of the goal incongruent emotion. This appraisal also leads to coping you remember the secondary appraisal factors ok.

You know all both the sets goal congregant and in congruent emotion were when you

look at the futuristic possibilities. So, you anticipate certain things and you also see whether it is no facilitating your coping mechanism or not.

Now, coping mechanism, if it know really helps you your appraisal of an emotion helps you cope this intern will provide a positive feedback to your experience of the given emotion. Now, your inability to cope or know the whole struggle that you have to know make in order cope that can lead to some specific type of illnesses and similarly the certain types of emotions can lead to a specific physiological disturbances and once you have specific type of physiological know unrest within the body disequilibrium within the body again it leads to specific type of an illness. The primary difference between the two models says that, one model, which basically talks about stressor, disturbance that leads to within the body.

And then finally, leading to a illness whereas, here emotion has been given an at most know priority, where it says that, your relationship with environment how you appraise it what type of final emotion you experienced, what type of emotion it is whether it is goal congregant, one of the goal congregant or one of the goal incongruent emotions. Whether you are able to successfully cope with that type of specific situation or not and that finally leads to specific type of an illness ok. So, both these models basically talk about the impact of an emotional state on the health of an individual.

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## Emotions and Health

- As emotions are byproducts of some form of person-environment relationship, somatic illnesses as well as psychiatric disorders can be explained in terms of varying degree of emotions
- Alexander's vector theory is based on the basic biological processes of intake, retention, and expenditure
- It also argues that all emotions implicated with the vectors can disturb the body

Now, as emotions are considered to be byproduct of the relationship between the person and the environment. And therefore, somatic illness, somatic illnesses means the illnesses which are manifested in terms of bodily symptoms as well as psychiatric disorders they can be explained with respect to the varying degree of emotional state ok.

There is an interesting theory we would not go into the details of it called Alexander vector theory, which basically talks about know, the basic biological processes of intake retention and expenditure. So, how much is the intake, how much you retain and finally, how much you exhaust and this vector theory it also argues that emotions implicated with vectors can disturb the bodily symptoms ok.

So, basically all I am trying to say is that you take the generality model of illness you take the specificity model of illness you take the vector theory. All these theories know which attempts to explain human illness ok, do bank upon the fact that the state of emotion that one experiences.

The density of it and the whole of appraisal mechanism leading towards one type of or the other type of emotion positively or negatively influences the health of an individual. You must be aware of know multiple types of practices that otherwise organized in the

society like I am sure at many places you must have seen this, where people assemble at a common place usually it is a park. So, they will go for jogging and then they have something like laughter sessions. So, there is no issue that invokes laughter in you, but you just told that you open your mouth to the fullest and you laugh at the loudest pitch, if you want to give it a try I can manage a session, where know you can have sensors attached to your body to look at you would not be able to other would be able to look at what changes your body underwent, when you underwent force laughter type of mechanism know. There is nothing that know invokes in voluntary laughter in you, but it is a deliberated attempt you know it is deliberate, but then you realize that it does influence your body. So, certain physiological mechanism that does get know influenced by this type of an act ok.

I am just diverting a bit Davidson and his colleagues they have conducted beautiful research that has to do with the brain areas that are involved in the state of meditation. I am deliberately coating know the research done by this team, because they had taken the Buddhist monks from dharamshala in Himachal Pradesh. So, their basically the Tibetan monks who are stationed in dharamshala in Himachal Pradesh and this know my interpretation it might have its limitation, but out of different type of religious practices that you see in around yourself. My if interpretation is that the Tibetan monks are for more opened compared to other religious groups in terms of scientific investigation say, if you approach them that, I want to scientifically investigate whatever you are practicing this is the group which is very, very open to it. They will never tell your at no no no these are all part of our religious believers and practices and cannot be subjected to scientific investigation. Like many other religious groups, which will does, which will not at all allow you it will say that now keep your science with you and I will keep my practice with myself never ever thing of scientific investigation of our religious practices.

One of my PG student, couple years back he had done his Phd on the Tibetan monks know and series of studies, we had conducted at that time to realize that know it is such an interesting community, which will very generously accept that whatever know tools and techniques you want to use, use it. And whatever you want to know investigate whether this good or bad or doable or undoable it really effects does not affect everything their very opened to. So, I really appreciate know practicing communities like

the Tibetan monks, which are who are very generous know, who would very easily accept that you want to scientifically prove something study something go ahead.

Davidson was also fortunate, because Tibetan monks say in dharmshala they agreed know for a new psychological investigation of their practice. The whole study was that these Buddhist monks had their ct scans the positron emission photography was used to identify the brain regions, which were know involved, which for activated during the state of meditation. The most interesting part of these research was that, you have certain areas of the brain, which are activated in the state of meditation, but after meditation also certain regions of the brain where still activated know the prefrontal area of the brain this very area still activated. The person is not meditating this means that meditation for specific duration perhaps has a much long term impact ok.

I have never come across study were scientific investigation of this type of laughter session has been made I had never studied. Otherwise I would have coated know what scientific investigation proves, but I am sure that the such type of know practices also influences people. And they do not have know instant effect rather they have long term effect. Like a Davidson studies primarily showed an interesting thing also that the prefrontal area of the brain was activated for longer duration that would mean that your brain remains at very com composed state even though there could be environmental disturbances.

Now, you imagine a situation when you attain a state when disturbance in an around you does not important of you. You as an individual process it, but there is no complete state of know emotional equilibrium that we are talking about know your physiological mechanism will not undergo any disturbance. Compare such cases with some types of sales personnel I am not saying sales personnels are vulnerable to it, but selected sales personnels would realize that know aggressive hunting for sale of the product hunting for the consumers. All types of benchmark know this target has to be achieved during this quarter that target has to be achieved in that quarter and you realize that within few years you start paying price for it. You know, you have know problem with no problem of ulcer, problem of gastric, many, many, many types of problems started starts cropping him ok.

These are actually the indicators that we do have system at place and the beauty is in maintaining the equilibrium within that system. What method you adopt is your choice, psychological practices will never induce know that I am not you go for meditation or go for laughter I am not advocating any of these all I am saying is that there are multiple options. You can choose any one of them that suits you that you consciously decide to practice, but those practices will certainly help you in terms of maintaining the equilibrium and the more and more you become capable of maintaining that equilibrium the more and more happy and healthy. You are healthy once again from the WHO definitions point of view, you are physically healthy you are psychologically healthy and your also able to maintain that social well being.

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### Emotions and Health

- Emotions do affect the biochemistry of the body and intense or sustained changes in the biochemistry can induce symptoms of an illness
- Further, emotions can be supplemented with inappropriate coping and faulty appraisal
- This could indirectly propel the individual towards maladaptation and distressing experiences, which can affect the biochemistry, thus leading to illness

It has been observed that emotions do affect our biochemistry. And instance or sustained changes in the biochemistry can induced symptoms of illnesses know. Further emotions can be supplemented with inappropriate coping or faulty operations. And this could indirectly propel the individual towards maladaptation and distressing experiences, which can affect the biochemistry and finally, it leads to illness. So, basically saying that emotions will know directly, starts know influencing the biochemistry. And once you have know the inappropriate coping or the appraisal mechanism coming into picture, it will either instance the intensify the realize of those chemicals in the body or it will

sustain it for a longer time. So, momentary, but instance realize of certain chemicals or realize of chemicals and realizing it continuously for much longer time. Than if this mixes up know with the faulty appraisal mechanism and in appropriate coping style these is bound to know shift you towards one or the other type of physical illness. When we come to a stress again we would refer to it, but because it has to come to the biochemical regulation therefore, I thought I must share this with you. We have a couple of know chemicals that are available in our brain, namely serotonin, dopamine, horizon and the whole of stressful experiences in life has to do with the segregation of these chemicals know how the body the brain is able to strike a balance between these chemicals.

We also know that it is the amygdale the hippocampus the limbic system, the system in our brain which has to do with regulation of emotion. Now, if you are under tremendous stress there is an extra amount of realize of horizon in brain what we are referring to here as sustained change, if you have know continuous realize of horizon in the brain, these means that there is an extra amount of horizon that is available in the brain it starts know making nerve cells tight, it will kill the nerve cells. And it has been realized that people know specially with respect to these killing of the nerve cells that gradually you realize that certain areas of the size of certain areas of the brain strings it will become smaller another example you can take of the post traumatic stress disorder ok.

The neuro physiological studies endorse that people who have had the p t s d symptoms they show striking of amygdale and hippocampus in their brain. Now, you have amygdale and hippocampus, which playing role important role in the regulation of emotion stressful state that strings the size of these two anatomical structure this would mean that once you are caught in this trap you should certainly try your best come out of it. The reason being that much longer you live in that state more and more you are making it durable in nature, because longer stay in that mental frame work would in tail striking of important neuro anatomical structure. Striking of these neuro anatomical structures would mean that you will have difficulty in terms of emotion regulation.

Now, in future, once you have difficulty in emotion regulation, once again it will know backfire know, so you have start working in loop. So, that is a trap where one should suddenly should be aware of and therefore, remember one thing we had referred to it



long back when we were know talking about the maintenance needs different types of defenses remember there we had talked about the physiological defense we had talked about psychological defense we had also talked about socio culture defenses ok.

So, there are no possibilities of sociocultural defense where you can exploit the group resources that are available to you and that can help you in terms of revisiting the faulty appraisal process. So, say for example, if I have faulty appraisal of mechanism, which in turn know makes me come forward with one of goal in congregant emotion know.

Say for example, I continuously know revisiting it and by appraisal leads to great sense disgust. Disgust for certain period is fine, say my lecture may disgusting for you, you gave option for attending the six march lecture and you are not selected, it could be disgusting for you, but these are all momentarily disgusts, where the duration of that goal in congregant emotion is not very long problem comes when you have long term know emotional state. That starts influencing you much heavily compared to these short term emotion. Short term emotions are fine you experience it than it is flushed out than you have another set of emotions ok. So, your momentarily happy, your momentarily sad your momentarily disgusted that is fine, but do not sustain it for a longer time.

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## Emotions and Health

- Emotions and appraisal affect the psychiatric disorders too
- Hypochondriasis: One remains preoccupied with the bodily processes and assumes of a disease
- We all do not get over-involved with it in order to search a possible disease
- So, hypochondriasis in a manner is an outcome of appraisal of the bodily functions and changes and the emotional reaction to it

We come to the last thing, because we have been oh over focusing on the physical health. So, this last slide where we would be basically referring to one of the neurotic problems, neurotic disorders, basically trying to relate emotional state with psychological disorder ok.

Now, emotions and the whole appraisal mechanism it is also bound to affect our psychological system. And therefore, it can make you vulnerable to a psychiatric disorder also. We take one example of hypochondriasis. Hypochondriasis is neurotic disorder, where the person who experiences it he or she remains pre occupied with the bodily processes. So, you are too occupied with what is happening to my body and the final derivation is that you always assume that you have a disease. So, that is the reason why it is classified as a neurotic disorder know, you are extra occupied with know your bodily mechanism and the end of it the final interpretation of these bodily mechanism is that you have a, that I have a disorder of physical illness.

For example the example could be say you continuously touch your know rist, my pulse rate is sinking. One interpretation it has over shouted, I think know the pumping of the blood from my heartary has increased, further increased, further increased, further increased this is the know preoccupied, which your bodily mechanism. Pain in the knee it has intensified, I think such types of indicators are the premature indicators of orthariters. Increase in the pluses rate this is an indicator of... And finally, what you conclude is not a small type of physical decease it is know you blow thinks out of proportion and then you give it very big name now and your than satisfied that is hypochondrias know.

Now, we all do not get over involved with know our body in order to search for possible diseases know, say for example, you are sitting in a particular posture and suddenly if you move and say there was minor pain here, it happens know, we do not pay attention to it, we are not over in gulf in those type of physical reaction by our body. We say ha it is ok, those of you are into games or sports know many a times you experience the take in your body, at one point or the other point in your body, but then you say it is ok, can you continue play we are never paid that much of attention to our bodily system and specially when you deliberately search into your own bodily changes.

So, as to extract disease for yourself, you remember the famous old movie of Rajesh Kanna, where he says know lives in coma (( )), if I say this he will pleased, because the name endorses that it is really a great decease know hypochondrias is something like that. You think of a very big decease and say I have now found of all type of changes that my body has undergone I think it is this and you take pride in this, this that is the reason why it is called know physiatrist disorder. And therefore, hypochondriasis in a manner is an outcome of appraisal of the bodily functions and changes and the emotional reactions that we showed to those bodily changes know.

So, first you search for a change in the physical system pulse rate has increased than you go for an appraisal of this and then this leads to an emotional state that emotional state interns make you know contrive of big decease and that disease know once again know leads you to experience another emotion. And finally, know you need a tear of specialist who can make you realize that common you do not have a disease in the body rather you have a disorder in the brain, because you are always searching for a decease.

When we come to our last unit where we would be talking about physiological disorder, primarily at that time you would be focusing only at two sets of disorder know. Personality disorders and adjustment disorders, but before that we would know just know very briefly know look at the whole set of neurotic and psychotic disorders and there in that list in the neurotic disorders you will find know disorders like hypochondriasis, neurasthenia these disorders will also figure out in that list ok.

So, let us all about emotion and adjustment what we have done in this model was that we initially established relationship between emotion and the adjustment process. We looked at the appraisal mechanism and we devoted one day to the appraisal of the goal congregant emotions, which are positive in nature. The third day when we talked about the goal in congruent emotions the negative emotions the outcome of, which are... And then finally, today we have associated emotion and health. So, one can very easily understand that one can plot a graph where you have adjustment emotion and well being all psychological, physical and social well being all will know fall on the same plane same (( )). So, that is all or that is all about emotion and adjustment, tomorrow we will be starting a new model were we would talk about couple of topics the first topic tomorrow

would be stress.