Psychology of Emotion: Theory and Applications
Professor Dilwar Hussain
Department of Humanities and Social Sciences
Indian Institute of Technology, Guwahati
Module 8, Lecture 19: Anxiety Disorders

I welcome you all to lecture number 19 of the course titled Psychology of Emotions-Theory and Applications. We are in module number 8 and in module 8 we are discussing emotion based disorders. So this module has two lectures, the lecture number 18 was about depression and today we will be talking about anxiety disorders. So these are two disorders most commonly found in terms of prevalence rate and at the core of these psychological disorders are emotions. So today we will be talking about anxiety disorders. So just to give you a brief recap of what we have discussed in the last lecture we have discussed the whole idea of depression as a disorder and more specifically we have discussed the various symptoms of major depression and we tried to understand how this depression or how these different symptoms could manifest in different types of extreme ends. For example, too much sleep or too little sleep and so on and what could be the reasons behind those extreme symptoms. We have also discussed that there could be there are different ways people have tried to categorize depression including categories such as typical depression, atypical depression, also the DSM-5 there are also categories of major depression, persistent depressive disorder and so on. So we have tried to understand all these categories and their symptoms and how they are different from each other. We have also discussed the possible causes of depression including genetic causes as well as past experiences of life.

We have also discussed various cognitive aspects of depression in terms of understanding how what goes on at the thought level when a person experiences depression including how thoughts become more irrational, and how explanatory style changes in terms of become becoming more pessimistic style of explanation. The concept of learned helplessness could also be very much applicable and most of the cases of depression could be associated with learned helplessness. We have also discussed rumination is another concept that is thought processes that could involve with depression as a disorder. So all these things we have discussed and how they are kind of at the foundation of depression in terms of manifesting different symptoms. Then we have discussed the various treatments available for depression including cognitive therapies and certain psychoactive certain pharmaceutical drugs and so on and all these possible and some of the extreme treatment options that are also available.

So all these things we have discussed in the last class. Today we will be talking about anxiety disorder as a cluster of disorders and we will try to understand what are the different categories of disorders we can kind of include under anxiety disorders. So we will be

typically talking about anxiety disorders and various types of it. We will be also discussing the causes of anxiety disorders and at the end, we will be discussing treatment of anxiety disorders. When we talk about anxiety disorders it is a cluster of disorders so there could be multiple disorders under this cluster and anxiety is a very commonly experienced emotional aspects that we all experience in our day-to-day life.

Commonly, we feel anxious or nervous before important things or events in our life such as before a test before a meeting before a presentation and so on. So it is a very common experience. Now those are the kind of experiences that are associated with experiences of anxiety. When we talk about something as a disorder the intensity and its impact is much more extreme. In that sense when we call something an anxiety disorders we are not talking about those common experiences of anxiety.

We are talking about excessive and pathological. So when we talk about anxiety disorders we are referring to excessive and pathological levels of fear and anxiety which became very much popular in psychiatry in the 19th century during Sigmund Freud's time. So something becomes disorder only when it becomes excessive and extreme and it kind of impacts your life adversely in terms of functioning level. So sometimes we experience common symptoms of anxiety but this is a kind of everyday experience but it can become disorder only when it becomes excessive and pathological level. Now it is normal that we experience anxiety in different situations of our life where there are uncertainties.

Chronic and intense anxiety without a visible cause is considered abnormal. When your anxiety becomes very chronic without any real causes behind it. So that's a very important keyword that we need to understand. A lot of evidences suggest that individuals with anxiety disorder may be overly sensitive to threat cues. So people especially with anxiety disorders are more prone to anxiety disorders are very sensitive to threats.

So any kind of threats or any kind of uncertainties or any kind of apprehensions they becomes highly sensitive to those cues and their reaction patterns become overwhelming and they exhibit heightened vigilance and readiness to attend to potential threats. So this is something very important. So there could be individual vulnerability in terms of why some people develop this disorder in the first place. Now if you look at the prevalence of anxiety disorder this is in terms of prevalence there are certain statistics available. So generally some of the data shows that about 4 percent of the global population has an anxiety disorder which could translate into a large number like 301 million people in the world.

So, a huge chunk of the population could be experiencing anxiety disorder. The number of persons affected has increased by more than 55 per cent from 1990 to 2019. Some of

the data shows that so the rate or prevalence rate of anxiety disorder is increasing with time. And this rate of increase seems to be quite dramatic and quite high in terms of if you see last few decades. Some of the earlier studies also reported some statistics in terms of current prevalence in somewhere in 2013 across 44 countries range between 0.9 to 28.3 percent depending on the different countries this prevalence rate kind of the range actually included from 0.9 to 28.3 percent. The global prevalence calculated to be 7.3 percent. So this is kind of little earlier statistics which also shows the prevalence rate could be quite high. In 2017 197.3 million people had mental disorders in India. So this is in the context of India some statistics shows that in 2017 about 197.3 million people had some kind of mental disorder which included 45.7 million people with depressive disorders and the remaining 44.9 million with anxiety disorders. So if you see the prevalence rate of depression and the anxiety disorder they are quite high. Quite neck to neck in terms of prevalence rates the number is quite similar indicating depressive disorders contributed to the most of the total mental disorders followed by anxiety disorders. So this is kind of in the context of Indian setting also the prevalence rate could be almost at par with the global global percentages.

Now when we talk about anxiety there are few other terms that kind of people get confused or mixed up or people kind of sometimes synonymously use these terms. But there could be subtle or some technical differences between these terms. So one term is anxiety another is fear and stress. Many times people kind of mix these terms. So it is kind of important before we talk about disorder in detail about the technical differences between these three terms.

So these are kind of very related emotions and sometimes people experience them together also. But they have some distinct differences. So when we talk about anxiety it refers to a state of uneasiness or worry about future uncertainties or potential threats. Anxiety is mostly related to you know some kind of future uncertainties or some kind of apprehension about what something is about something that is going to happen in the future. So some potential threat you are expecting or some kind of uncertainty you are expecting from the in the near future.

So in response to that our kind of that emotional experiences that we experience is called anxiety and it is always associated with symptoms like uneasiness and sense of worry and so on. So it could be associated with various physical symptoms such as sweating, palpitations, muscle tension etc. It is a natural and normal response to stressful events in life but when it is it becomes excessive it can lead to disordered state. So mostly the anxiety word is used in the context of apprehensions about some potential threats mostly in the context of the near future or something that is going to happen in the future some sense of worry about that kind of possible things that are going to happen. Now fear is another term

where you know many times it could be mixed with anxiety also.

It is a natural emotion that arises in response to immediate or present danger. Fear is a fear that arises mostly in the present context when you see something is dangerous in your environment. So in response to those situations or whatever the stimulus that is present if they are perceived as dangerous that could be experienced as a in the emotional term it is fear. So it arises in response to an immediate or present danger whatever we are experiencing in the present context. So mostly fear is in the present context.

So it is characterized by a fight or flight response which we have already discussed I think in the physiological aspects of emotion when we have discussed in a few in modules where we have discussed physiological aspects. So it mostly whenever we perceive something as dangerous there could be a fight or flight response where you may try to fight to the situation or may run away depending on whatever is appropriate as per your thought processes. So this is a physiological response to perceived threat fear is usually adaptive fear could be adaptive in a sense it helps you to protect yourself whenever there is a danger in the environment. So that is what most of the time fear could be adaptive and it help us to survive and take action appropriately in a situation where there is a perception of threat or danger. So mostly fear happens in the present context.

Stress is a term that is generally it is a response of the body's mind to physical or emotional demands or pressures from life whether they are real pressures or you perceive something as demands or challenging situations whatever that is perceived it may not be real also. So it is mostly the stress is an interpretation process where you kind of interpret a situation as more than your ability to handle. The moment you interpret a situation that you will not be able to handle or your resources are not good enough to handle a situation the natural outcome or the emotional experiences that we have is stress. So it is where the body responds to the mind responds to a situation which is perceived as more than your resources can handle the situation. The moment you think you will not be able to handle a situation that is a natural response the body and mind do that is called stress.

So some kind of demand some kind of pressure from the environment which is perceived as possibly that there could be challenges in terms of coping with the situation. So the resultant experience is a stress. Stress could be positive also it could be negative depending on how the context or the situation some stress could be positive in a sense it could stimulate you motivate you to do things that you probably will not do. So if there is stress you will be more likely to do that task simply because there is a motivation there is a situation that is propelling you to do something. So lot of these challenging situations are associated with stress but this could be positive.

So a lot of stress could be negative in fact if particularly the stress is very chronic or very intense and if it remains for a long time it could have a very adverse impact on your body and mind system. It could contribute to psychological disorders it could contribute to physical disorders and so on particularly diseases like heart disease and so on could be highly connected to stressful experiences. So in summary anxiety is a state of uneasiness or worry about future uncertainties. Fear is a response to immediate danger in the present situation mostly and stress is generally response to physical or emotional demands more specifically when you perceive that situation is more than your resources can handle that is the stress. So they are all related many times they are all mixed up in the real-life situation in certain situations can evoke fear anxiety and stress also at the same time.

Sometimes they are experienced separately also. So while they are related they have distinct differences which are important in order to understand how the managing this emotion effectively. So it is important to understand the difference between this term because generally people mixed these terms together and use synonymously. So when we talk about anxiety disorders so it is a category of disorders which has many, many specific disorders under this term. So it is not just one disorder there could be multiple anxiety disorders which could be kind of collectively called as an anxiety disorder.

So the recent DSM-5 is diagnostic and statistical manual of mental disorder the most recent one is the fifth version according to this DSM-5 the disorders which could be categorized under anxiety disorders include generalized anxiety disorder, panic disorder agoraphobia, specific phobia, social anxiety disorder, separation anxiety disorder and selective mutism. These are the disorders which are kind of considered anxiety disorders. So we will be looking at each of them very briefly and try to understand how they are related to anxiety and what are the symptoms of each of these. Now before this, the DSM-4 the earlier version had there are some differences made in the recent one from the earlier version made some significant changes in the anxiety disorders lot of changes have been made. In DSM-4 the earlier version of the manual of mental disorders OCD obsessive compulsive disorder was also included under anxiety disorder, post-traumatic stress disorder was also included under this one the anxiety disorders, and acute stress disorders were also classified as anxiety disorders.

So earlier OCD, PTSD and acute stress disorder were considered under anxiety disorder. Now in the DSM-5 OCD and related disorders are grouped separately. So OCD obsessive-compulsive disorder is now a separate category it is no longer under anxiety disorder and PTSD and acute stress are also separated and classified separately under a new category called trauma and stressor-related disorders. So a separate category was introduced to include PTSD and acute stress disorders. So they are now considered under trauma and stressor-related disorders.

OCD is also separated now these are not classified under anxiety disorders. At present in the DSM-5 and anxiety disorder included the categories that we have listed earlier. DSM-5 also introduced some new anxiety diagnoses which were earlier not there like separation anxiety disorder was not there, selective mutism was also not there and there is another category other specified and unspecified and the anxiety disorder was also included under DSM-5. So these are new inclusions under this category. This new category of last one that is other specified and unspecified anxiety disorders actually includes conditions that do not come under any of the other categories and cannot be kind of put into any of the other categories which do not meet the full diagnosis criteria for any of the other anxiety disorder.

So they could be kind of categorized under this but still cause significant distress or impairment in daily functioning then some condition could be considered under this. So this is like if something is not explainable by any other categories it could be put into this the last category. So these are new inclusions under DSM-5. So let us see the DSM-5 categories of anxiety disorders or each of them will briefly look into them what are the symptoms of this one. So one particular anxiety disorder which is called generalized anxiety disorder is something that is characterized by excessive and uncontrollable worry about everyday things such as work, health, family and finances.

So it is a very generalized anxiety disorder. There is no specific reason or specific cause or specific target object for which you are anxious. It is a very generalized kind of thing. You are kind of anxious about most of the things in your life. So you have a sense of uncontrollable worry constant worry about almost everyday things like work health about family finances is a generalize almost everything becomes an matter of anxiety.

So that is called anxiety disorder. Most of this worry are unrealistic. It is very understandable. You cannot everything cannot go wrong in your life if you are kind of anxious about almost everything that means most of these things will be unrealistic and out of proportion to the situation and these things should last at least for six months then only it can be kind of categorized under disorder category. So if at least six months people are kind of in this state where they are kind of unrealistically worrying about most of the things of their life then it could indicate that you know the person may be under or experiencing generalized anxiety disorder. Other symptoms of generalized anxiety disorder may include restlessness fatigue difficulty concern in concentration irritability muscle tension sleep disturbances and so on.

These are some of the additional symptoms that one can experience in the generalized anxiety disorder and this is something very common it is true for all disorders the symptom

must cause significant impairment in daily functioning. You can call something a disorder only when it impacts your life adversely. You are not able to function properly because of the effect of this emotional state. So you are not able to function in your professional life in your personal life and so on. Everything is disturbed then only it becomes a disorder.

Otherwise if you are just experiencing some symptoms anxiety symptoms but it is you are able to function properly then it may not be considered as a disorder. The next category of under anxiety disorder comes is panic disorder. So this is something also a very specific category that is listed under DSM-5 and the criteria in DSM-5 is like number one is recurrent unexpected panic attacks. So one of the things that happens under panic disorder is that people experience unexpected panic attacks which could be recurrent.

So multiple instances of panic attacks could happen. Recurrent it could be one after the other at a certain interval of time or maybe consequently and people may not be expecting they may not even predict when something suddenly something can stimulate a panic attack. So panic attack is a sudden and intense surge of fear or discomfort that peaks within a minute and includes at least four of the following symptoms. So what happens in a panic attack is that it is very sudden suddenly it will kind of get stimulated by something with an intense surge of fear and discomfort that peaks within minutes. Suddenly you become uncontrollable fear and discomfort may arise in your system in your mind-body system and it suddenly becomes at its peak it very intense it could include lot of symptoms at least four of the following symptoms should be there. It could include whenever you are in a state of panic attack you can experience palpitations pounding heart or accelerated heart rate.

So your heart rate will become very fast because of the intense fear you can start sweating very profusely there could be trembling or shaking in the body sensation of shortness of breath or smothering. So the suffocation feeling of suffocation not able to take breath this could be also associated in the panic attack at least four of this should be there, not necessarily all the all that we are discussing here. Then feeling of choking chest pain or discomfort nausea or abdominal distress, feeling of dizziness ,unsteady light headed or fainting or about to fall faint those kind of experiences could be there. Derialization means feeling of unreality or depersonalization or being detached from oneself or you may feel like you are completely detached or suddenly you are not able to control your body so body is somewhere else and you are somewhere else. So depersonalization such kind of temporary state could arise.

Fear of losing control or going crazy fear of dying, all these symptoms could be experienced under panic attack not necessarily all this will be experienced but at least four of this will be there should be there to consider something as a panic attack. So this is the first criterion. Second, at least one of the attacks has been followed by one month or more

of one of the following. So at least one of these attacks so there could be multiple attacks but one of these attacks should be followed by one month means after the attack at least for one month people may experience some of the other aspects like persistent concerns or worry about additional panic attacks. So whenever you have been one attack so you are consistently again worried I may have another attack.

So there is a persistent concern and worry about additional panic attacks and what will happen if such an attack happens. So there is a consistent worry about that I may lose control may have a heart attack or I may go crazy and so on. So this could be consistently in your mind I may get another attack and I may lose control I may go crazy and all kinds of things so could be associated with the panic attack or there could be a significant maladaptive change in behaviour related to the attacks like you avoid exercise or unfamiliar situations the person may start stop going to situations in life different situations of life with the fear that he or she may get another panic attack. So the person may avoid doing exercise or going to some new places and so on simply because of fear of getting another attack. So that could be also another thing after an attack person may have these kinds of symptoms at least for one month.

The third aspect of a panic attack is that the panic attacks are not attributable to the physiological effects of substance or any other medical condition. Now this should not be stimulated by some taking some medicines and other things. So if it is an effect of some other medicine we cannot call it a panic attack. Panic attacks should happen without the impact of any other substances.

So that's something very important. So panic attacks are better accounted by another are not better accounted by another mental disorder such as so there should not be this attack should not be because of some other mental disorders you know it should not be better accounted. So it should not be because of some other kind of anxiety disorder panic attack is there then we cannot call it a panic attack if it can be explained by some better explain by some other disorder. So it should not be better explained by other mental disorders. It could be associated with some other mental disorder sometimes panic attacks could be associated with some other mental disorder. But the panic attack itself should be explained by the panic attack itself, not by the other mental disorders.

So generally mental health professionals could kind of diagnose this and treat panic attacks. So treatment part we will be talking a little later some possible and available options. So this is about panic attacks. So these are some of the symptoms which generally mental health professionals takes into account to diagnose somebody as a whether they have panic attack or not.

Another disorder that is considered under anxiety disorder is agoraphobia. So agoraphobia is listed as a separate diagnosis in DSM-5. But generally, it is often comes with panic disorder. Generally, people with panic disorder may also experience agoraphobia. Generally, they may come together. But agoraphobia itself is a different disorder and is listed separate disorder in the DSM-5. But many times it could be associated with the panic disorder itself. So what are the diagnostic criteria for agoraphobia? It includes marked fear or anxiety about two or more of the following situations. So generally it is the fear of certain situations in life which includes using public transportation such as buses trains and planes. There is a very strong fear when the person uses public transportations or buses trains and planes where there are other people in the situation being in open spaces such as parking lots marketplaces bridges and so on. So generally it is stimulated by certain situations. Situations like this generally could stimulate anxiety so which is called as an agoraphobia.

It may also be stimulated by being in enclosed spaces such as shops, theatres, and cinema halls. It could also be stimulated by standing in line, being in a crowd or being outside of the home alone. Sometimes could be stimulated by that. So generally individuals whenever because they are kind of experience anxiety because of whenever they are in these kinds of situations they generally avoid using or going to these kinds of places or experience intense fear or anxiety when exposed to these situations. Naturally, the person will try to avoid but many times if they cannot avoid they need to go to these places and these places generally stimulate intense anxiety.

So that this situation is called agoraphobia. Now generally the fear or anxiety is out of proportion to the actual danger posed by the situation and to the socio-cultural context. So generally obviously we call this disorder simply because it is out of proportion. There is no objective reality to the situation that this will cause problems to that person but this is kind of blown out of proportion generally or the person kind of experiences out of proportion as compared to the actual danger or there may not be any danger at all. So the fear as anxiety or avoidance is persistent typically lasting for six months or more. At least people if they experience for continuously six months this kind of fear then the probability of kind of diagnosing them as agoraphobia increases very much.

So this fear anxiety and avoidance causes clinically significant distress or impairment in social occupational and other areas of functioning. So for every disorder already I said that functional impairment is very important. So if all these fears kind of impair your functioning in daily life that should be another criteria to call it as a disorder. So this fear anxiety and avoidance of this situation is not better explained by any other disorders. If they are better explained by any other disorder obviously they will be categorized under that disorder.

This should not be explained by other disorder better explained. Then only we can call it as an agoraphobia. So generally it is as I said that most of these agoraphobia cases are often diagnosed along with panic disorder because many people in agoraphobia experience panic attacks in situation that trigger their fear and anxiety. So mostly whenever the situation that we have listed whenever a person with agoraphobia encounters such situation then the probability of experiencing a panic attack is very high. So generally the panic attack and this disorder kind of goes hand in hand. So people can properly metal health professionals can diagnose it and treat it properly.

So this is basically the diagnostic aspect of agoraphobia. The next one is called an specific phobia which is also considered under anxiety disorder. So DSM-5 characteristics of specific phobia include marked and persistent fear or anxiety about specific objects or situations. So specific phobia means people are fearful about specific things. Specific things whenever they encounter it stimulate anxiety in their mind. So people are there could be very specific things where they stimulate very strong anxiety reactions and which could impair their functional aspects and so on.

So examples could be people could be have specific phobias about some animals some natural environment. It could be some people are phobic about heights or thunderstorms and so on. Animals may include snakes, it may include spiders and so on. Some people may be phobic about blood injection injury and maybe some situations like flying and close spaces and so on. So people may be phobic about different situations in life but in specific phobia, people are they show this anxiety reaction only in reaction to those situations or those objects which may be very specific from person to person.

So the fear or anxiety is excessive and unreasonable that is why we are calling it a disorder given the actual danger posed by the object to the situation. The phobic object or the situation almost always provokes immediate fear or anxiety. So whenever they see that situation if somebody is fearful of any object the moment they see that object it immediately provokes fear or anxiety. The phobic object or situation is actively avoided or endured with intense fear or anxiety. For example, if somebody is phobic about spiders the moment they see a spider it will immediately provoke fear and anxiety and the person will try to avoid and run away from that situation whenever they encounter such objects.

The fear or anxiety persistently typically lasting for six months or more at least people should experience such fear at least for six months or it could be more than that also to kind of consider it as a disorder. The fear or anxiety causes clinically significant distress and impairment which is common to all disorders and it should not be better explained by any other mental disorders. So it could be associated with some other mental disorder but

it should only better explain then it will be considered under that only. So if any other medical condition remains this fear or anxiety will be much more than what is normally experienced. So it is very important to note that specific phobias can have a significant impact on an individual's quality of life and can be treated with therapy medication and a combination of those things.

Obviously most of this anxiety disorder can impact your quality of life because you will be certain situations and certain objects and all this could limit your life experiences and they may stimulate so much of fear and anxiety that you will not be able to function properly. So in that sense it could have a negative impact on the quality of your life. Another category that comes under anxiety disorder is called social anxiety disorder. So the DSM-5 criteria for social anxiety disorder are marked and persistent fear and anxiety about one or more social situation in which the individual is exposed to possible scrutiny by others. So social anxiety disorder by the name it is very clear that people are here anxious about social situations.

Situations where they are exposed to other people's scrutiny or where the other people can judge you or kind of possible scrutiny by other people in the social situation. So that evokes anxiety. So examples of social situation include public speaking, meeting new people, eating or drinking in public. So wherever there is a situation where other people are there and they may be evaluating you, scrutinizing you that evokes anxiety.

So that is called social anxiety disorder. The individual fears that they will act in a way or show anxiety symptoms that will be negatively evaluated by the. So there is a constant fear of how others will judge me, how others will evaluate me, I may do something wrong or something silly others how others will perceive me. So this is a constant worrying factor that goes on in the mind of people with social anxiety. So that's why they are kind of become highly anxious in social situations.

So social situations almost always provoke fear and anxiety. In any social situation they will be uncomfortable. So that's the thing because it evokes anxiety. Social situations are avoided or endured with intense fear or anxiety. So people try to avoid social situations which could very strongly impact the quality of life because we are social animals we cannot avoid social situations and avoidance of social situation in many times could you know to impact your life very negatively because you need to deal with people to for the progression of your own life as well as your personal as well as professional life.

So it's an important aspect of every human life. But people with social anxiety disorder they highly their lives constrained by this fear. So this fear or anxiety should be persistent and last at least for six months or more. So that's the criteria. Fear or anxiety causes

clinically significant distress or impairment in different aspect of one's life. So that is there with every disorder and it should not be better explained by any other mental disorders.

If any other medical condition is present fear and anxiety or avoidance could be more it could be excessive because it is kind of added by other medical condition. So it is very important that social anxiety disorder can have a significant impact on our quality of life as we have already seen and this could be treated with proper mental health professionals can do diagnosis and proper treatment of such disorders.

So there is something called a separation anxiety disorder which was also kind of newly added in the DSM-5 a category which could also be mostly seen in children. So this is called as the criteria or the diagnostic features of separation anxiety disorder, first is this developmentally inappropriate and excessive fear or anxiety connect concerning separation from those to whom the individual is attached. So it becomes developmentally inappropriate and excessive fear and anxiety are connected with separation from some of the important figures in one's life like it could be a father mother and whatever it is some attachment figures would be there.

So as a child whenever a child is born the child is attached to mother and to some extent father or immediate family members. So the attachment figure would be the mother. Now let's say it is appropriate for a newborn child to be attached to the mother or for certain years certain number of years but it will be inappropriate if the child is not able to separate from the mother and do other task or need to go somewhere else. So it becomes in the case of separation anxiety disorder it becomes a developmentally inappropriate means in this stage of development one should not be so attached or it should one should be comfortable of moving away and doing the task.

So when the person is not able to do that it becomes a kind of disorder in that sense. So it is a developmentally inappropriate and excessive fear or anxiety concerning separation from those to whom the individual is attached. As evidenced by three or more of the following. So this excessive attachment could be expressed or manifest itself in different ways some of these ways are like this. So there could be recurrent excessive distress when anticipating or experiencing separation from home or major attachment figures. So the moment the person even anticipates that he or she needs to go away from the attachment figure it could be mother or father whatever it is or from the home the person experiences you know kind of excessive distress or anxiety.

It could be when they are moving away or it could be just the perception that I need to move away. So that is called that could be one of the symptoms the person could persistent or excessive worry about losing or about possible harm befalling a major attachment figure. A person has a consistent fear or worry about that he or she may lose or there may be

something harm befalling on them or particularly the major attachment figure with whom they are attached. So that kind of could be exaggerated thought processes could also be there which could be associated with excessive fear of losing them. There could be persistent or excessive worry that the untoward event will lead to the separation from a major attachment figure example getting lost or kidnapped. So that could be also another thought that if they kind of get separated they may be lost or kidnapped by somebody or something like this. So that kind of exaggerated fear could be associated with separation anxiety disorders. There could be persistent reluctance or refusal to go to school or work or elsewhere because of separation fears. So such kids particularly those who are experiencing separation anxiety disorder could find it difficult to go to school because they need to move away from the attachment figures. So that could be a problematic aspect in that sense or going to or playing with the other kids and so on. So those kind of issues could be there. So persistent reluctance or refusal to be alone or without major attachment figures at home or in other settings.

So that could also be the person consistently refusing to be alone or without major attachment figure. The person always wants to be associated with the attachment figure. There could be persistent excessive fear of or reluctance about being alone or without the major attachment figure at home. So basically it is the same I think the point is repeated here.

So these are some of the possible manifestations of symptoms of separation anxiety. Some of at least three of them three or more could be present to an individual who is experiencing this separation anxiety disorder. There could be other important symptoms like refusal to go to sleep without being near to the major attachment figures, repeated nightmares involving the theme of separation, and repeated complaints of physical symptoms when separation from major attachment figures occur or is anticipated. So physically there could be manifestation of symptoms in terms of physical illnesses and so on could be also experienced by the people. A second important aspect of separation anxiety is that you know this fear anxiety or avoidance is persistent lasting for at least four weeks in children if it remains for more at least for four weeks for children and adolescents and in case of adults if it is more than six months then it becomes a possible case for you know the diagnosis of separation anxiety disorder.

It happens mostly in children but some cases of adult cases could also be there. The disturbances causes obviously clinically significant distress and impairment in social academic occupational other important areas of function. The disturbance is not better explained by any other mental disorder. So those are kind of common in all the disorders. So it is very important to understand this separation anxiety disorder is mostly experienced in children when with development they are not able to kind of separate from the

attachment figure like mother or father but it can occur to adults but the cases could be very less.

So that is something very important about separation anxiety disorder. The last one is called selective mutism is another anxiety disorder which was also included in the DSM-5. Its symptoms are like consistent failure to speak in specific social situations in which there is an expectation of speaking. So the person is selectively mute in the sense that the person is not able to speak in certain specific situations where he or she needs to speak where there is a necessary or there is a need to speak the person is not able to speak. Now this failure to speak is not associated with some problem in the common language it should not be or kind of or it is not because of that person is not able to communicate that is not the case but because of anxiety probably the person is not able to speak in a situation where he or she needs to speak despite that person is able to speak in other situation.

So these are kind of some selective situations the person is not able to speak. The disturbance interferes with educational occupational or achievement or with social communication. So this could influence or create a disturbance or interfere in occupational life social communications and so on. The duration of this disturbance should be at least for one month not limited to the first month of school. Obviously when the child goes to school first months probably the person will have difficulty in speaking and so on because of fear or anxiety and so on. So in those cases are not included but in general, where they could speak in generally at least one month if they are not able to speak in certain selective cases which could not be explained because of lack or because of lack of communication or inability to speak or those cases are kind of not the case in such situation the selective mutism could be kind of diagnosed it becomes a possible case.

So this failure to speak is not due to lack of knowledge it is not that a person does not know what to say in that situation it is not a failure of knowledge or comfort with the spoken language required. So the person is also able to speak so the comfort issue is not there lack of knowledge is also not there. So the reason is mostly anxiety or certain situation provoke anxiety the person become kind of not able to communicate or speak in that situation. And this disturbance is not better accounted for by a communication disorder. So communication disorders like stuttering and so on do not occur exclusively during the course of pervasive development disorder like schizophrenia or other psychotic disorders.

So it is not explained by some other disorder. So that is the thing sometimes some people can become selectively mute one possibility is because of the anxiety associated with certain situations and it is not because of communication failure or not being able to speak that is not the case person could speak in that language the person may know to speak but

despite that not able to speak. So selective mutism is typically diagnosed in childhood and can have a significant impact on social mostly in childhood these cases are kind of reported. So certain specific kinds of therapies could be included in terms of treating those disorders. So these are some these are the categories that are listed under anxiety disorders all these categories you see anxiety is the common thing which causes there is an distress in the person to the extent that the person is not able to function properly. Now this distress could the source of this distress could be diverse things like specific objects or social situations or general life situations or it could be you know whatever it is all these different cases that we have seen every disorder has different causes but the main the central aspect is that all these different aspects causes significant distress and the person is not able to function properly because of that distress.

So let us see what are the possible causes of anxiety disorders. If you look at the literature so one of the reasons could be the genetic predisposition of an individual vulnerability and why some people have anxiety disorder in the first place one reason could be genetic reason. So certain individuals are more susceptible or vulnerable to experiencing intense fear and anxiety than others some people experience more fear and anxiety as compared to others simply because of there is disposition is different some people are kind of biologically more reactive to situations of life so anxiety is more common among them. So children who display excessive anxiety have a higher likelihood of developing anxiety disorders so some people have excessive anxiety naturally in their system they are more likely to develop anxiety disorders later. When expressed to nearly identical traumatic experiences some individuals develop anxiety disorder while others do not. So many people we see a lot of individual differences the same five people may be exposed to one event but the reaction of five individuals could be very different some may develop anxiety disorder after some may be just normal some may have another kind of responses.

So why do these individual differences happen? The reasons are not very clear but one reason could be genetic differences or genetic composition in terms of the reactivity to situations that are different because of the genetic differences in the genetic makeup. So lot of studies show that both panic disorder and phobias are prevalent among people with a family history of similar disorders especially those with close relatives such as identical twins. So a lot of studies show panic disorders and phobias kind of run in families so close relatives if who also have panic disorders or phobias are more likely to have other close family members who are also likely to have more of these disorders more likely to experience that does not mean they will have they will experience they are more likely to experience probably because of the genetic connection and genetic predisposition or vulnerability. Similarly, the identical twins also show they experience similar things panic disorders if one twin has others will also most likely to have similar disorders.

So that shows there could be a possible genetic connection towards this disorder. One possible action how genes kind of create these differences is through neurotransmitters. So gene kind of stimulates different biological aspects in our system how different glands functions how certain neurotransmitters are released. So gene could influence all these things in that sense the gene could also influence your behavioral reaction and psychological aspects. One of the neurotransmitters means certain chemicals that are released in the brain neurotransmitter found in the amygdala region of the brain which have been found to be connected with anxiety disorder is serotonin which has also been linked to depression also it is linked to depression and it is also linked to anxiety disorders.

Specially this is released in the amygdala region of the brain where emotion is processed particularly the fear is processed. Previous research has suggested that the gene controlling the production of the serotonin some genes the gene which is kind of associated with the production of serotonin transporter protein seems to be linked with neuroticism and depression. So neuroticism is related to anxiety person with neuroticism experiences high anxiety may play a role in anxiety disorders. So this particular gene which is connected with the production of serotonin transporter protein could be linked to anxiety disorder. So several studies have found that individuals with the short form of this gene so this gene could have different versions of this gene present in different humans. The short form is more specifically seems to be connected to the anxiety disorder then the long forms the people who have short form of this gene seem to be more vulnerable for anxiety disorder as compared to the people who have a long form of this gene which is responsible for the production of serotonin transporter protein.

So this could be one kind of possible gene that was found connected to anxiety disorder. So lot of fMRI studies also found that in a short form of gene short people with short form of this gene, short a stronger amygdala response when viewing photographs of people express expressing anger and fear and so on. So that means they are more reactive to emotional cues. Another study found that individuals with the short form of the gene learned danger cues more quickly in a fear conditioning paradigm. So they are more reactive to dangers and that kind of emotional situation especially the people with the short form of this gene.

So it is a possible alteration in serotonin activity led to an over responsive amygdala which is related to anxiety disorder. So it is possible that such genes especially this gene could be connected to anxiety disorder. However, not everyone with this gene develops a disorder and some people without it also do so that means everything cannot be explained by the gene so there can be other factors included or could be responsible for anxiety disorder. So gene could be one aspect but in many cases without this gene also people have anxiety disorder so that means other factors could be contributing to it. Another factor

that is could be connected to anxiety disorder is traumatic events that happens in the past or personal experiences in life could also contribute to anxiety disorders.

So many of us individuals develop fears after certain events in their life particularly traumatic events. For instance, children who have been sexually abused are on average more likely to develop fear related disorders. So your life experiences can play a very important role particularly if you have experienced traumatic events in life that could lead to future possibility of developing certain anxiety disorders because of the past events that you have experienced. The impact of this event could lead to kind of development of anxiety disorders in the future like the studies have found that children who are sexually abused during childhood are more likely to develop fear-related disorders and depression in later in their lives. A small number of individuals can link the beginning of their phobias to personal experience. Some people can link why they develop fear to specific objects they could link to some personal events in their life such as one person who found a dead body in a lake and thereafter had a phobia of water.

Just by looking at a dead body in a water, the person develops phobia of the water itself. So that is possible some personal events could be associated with why they develop fear for something. However many individual actually may not identify any specific event caused by phobia where gene can play a role. The research discovered that the twins of those who had a phobia had a similar risk of developing phobia means twins may have similar reaction patterns so that means genes could play a role here also regardless of whether could recall a traumatic event or not. So the similarity of phobia reactions in the twins particularly the identical twins could also link kind of indicate some genetic predisposition.

So this implies that traumatic experience does not raise the risk of developing a phobia beyond existing genetic factors. The idea is this traumatic events' genetic factor could kind of combine together and contribute to the development of anxiety disorders. So how anxiety disorders are treated mostly cognitive therapies are used just like depression where people kind of they try to kind of intervene at the thought processes level where try to change the thought patterns to cure the anxiety symptoms. So cognitive therapy which has been effective in treating depression can also be used to treat generalized anxiety disorder particularly and some panic disorders also. So in generalized anxiety disorder therapy may focus on identifying that the feelings of worry and the people may be slowly they try to thought the therapies kind of teach them and increase their tolerance for uncertainty they slowly slowly they learn to kind of tolerate uncertainties in life and not to become anxious for every uncertainties in the life and develop problem solving skills instead of just constantly worrying about what will happen if this happens and so on. For panic disorder treatment may involve reinterpreting physiological symptoms particularly if heart beat

starts becoming faster people may experience or think that panic is going to happen.

So they slowly slowly the therapies teach them how to kind of interpret the physiological symptoms then and every heartbeat rise does not mean panic symptoms. So slowly slowly they are trained to reinterpret those physiological symptoms to reduce their perceived threat and increase tolerance for some physiological symptoms which kind of they may interpret as sign of the next panic attack. In the case of phobias most people use exposure therapies so which are the person whatever is the object of fear person is slowly slowly exposed to those objects but in a more controlled way so that the person learns to face them. So specific phobias are often treated using exposure therapy which involves gradually exposing the individual to the object with which they are fearful.

For example, a therapist may use exposure therapy to help someone with arachnophobia which is a phobia for spiders. So if somebody is excessively afraid of spiders they could use exposure therapy here the therapy may begin with imagining a small spider several feet away and how you experience this. So become more tolerant to the spider imagining them or actually kind of looking at them from a distance and then gradually progressing to more realistic situations such as bringing in a small spider on the other side of the room and eventually working up being able to touch the spider. So slowly slowly in a more controlled way, the person is learned to face those objects in a more gradual manner so that their fear is reduced and they are no longer afraid of those objects. So that's called exposure therapy.

This is generally done in a safe and controlled environment so that the person does not become overwhelmed and doesn't cause any harm. Research has shown generally exposure therapy are effective in treating specific phobias if people have fear for some specific objects with many individuals experiencing significant reduction in their fears and anxiety. People also sometimes use anxiety relief drugs such as tranquilizers specifically the only certified doctors and medical professionals can give these drugs not just everybody can take it. So like tranquilizers are used to reduce anxiety these are commonly used and it include Valium and many other drugs which are typically taken orally as pills and can their impact lasting for hours with varying duration especially if when the anxiety symptoms are very strong initially some tranquilizers could be helpful. So this tranquilizer enhance the activity of neurotransmitter called GABA which is the main inhibitory neurotransmitter throughout the nervous system by doing so tranquilizer reduce activity in the amygdala which decreases the response to emotion of fear and so on. So this neurotransmitter works on this neurotransmitter and reduces the activity in the amygdala region of the brain which is responsible for most of the fear and emotion-related reactions so activity goes down so anxiety also goes down.

However, this tranquillizer all these thing drugs may have side effects also they may reduce the overall activity of the brain and cause drowsiness and impairment and other functions also could be there. So generally a professional medical person can give it whenever it is really necessary and so on. So these are some of the things about anxiety disorders so this was about emotion-based disorders in this mostly we have discussed two major disorders which are in terms of prevalence rate their numbers are very high in the population in the global context so one is depression and one is anxiety disorders. So we will not be talking about any other emotion-based disorder because there are many disorders where emotion could be at the center of it but these are the two major disorders that we have included in this module. So we will be talking about emotion regulation in the next module on how to regulate emotions. So with this, I will stop here. Thank you.