Psychiatry an Overview
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Module-03
Psychiatric Disorders and their treatment-1
Lecture-12
Anxiety Disorders

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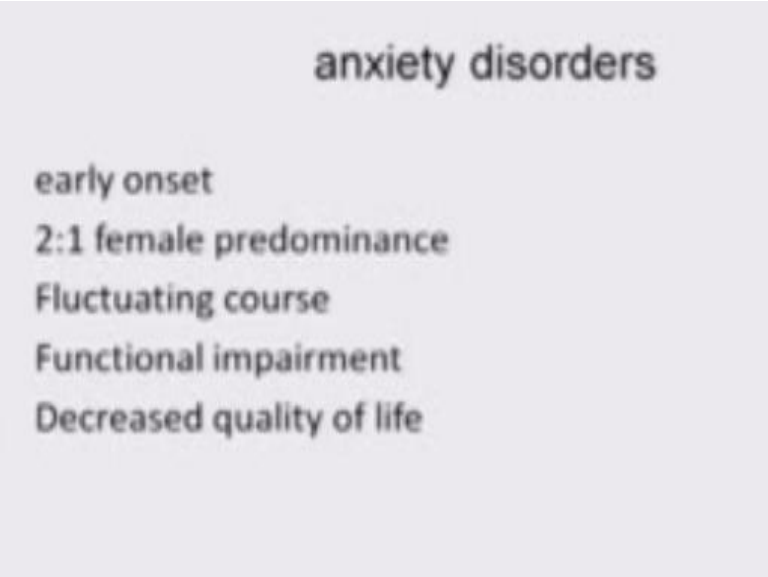

Hello so as we are delivering more and more into psychotic illnesses and some of it is you must be knowing and some of which you learn as you move around in neurosciences and your medical career or psychology. So more than the person depression and schizophrenia and dementia, the word you would you which, you would have heard and I am sure would have experienced this word call anxiety and some people actually say that all human beings live in anxiety perpetual anxiety all the time. So is this anxiety normal or abnormal, so before we talk about anxiety disorder let us look.

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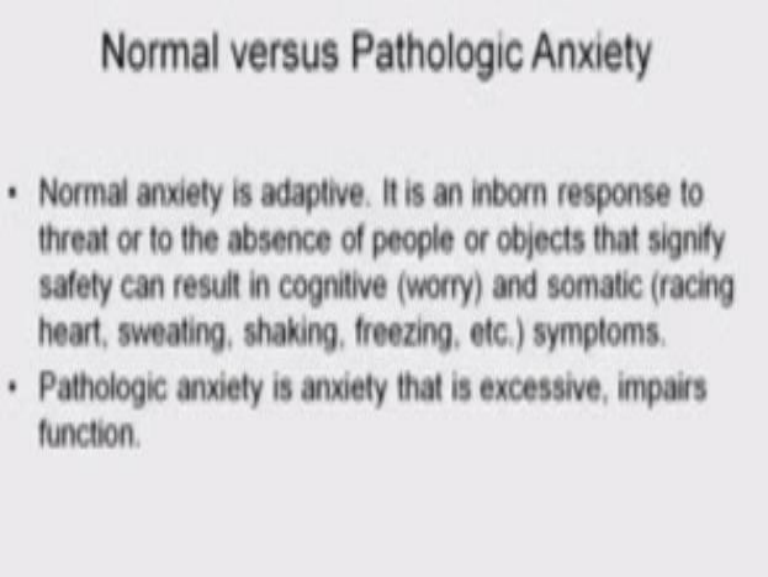

What is that normal what is this pathological anxiety? Normal anxiety is normally very adaptive it is a inborn response to threat or to the absence of people or two objects that all the environment which provides your safety. Any absence of this can lead to either a problem in thought which is worry, or a physical symptom. Like some of them are mentioned, racing heart, sweating, shaking, drawing of mouth, tingling sensation this is our physical symptoms of anxiety and continuous worry not at the level of thought.

Thought must be there but apprehension that something will happen, something will go wrong, you all of us suffered this, imagine we are just sitting before your exam just before they received the it is important to examine just before you receive the question paper your heart is really going unless you have really turned your mind to be very cool are given so many exams at your mind become cool.

Believe me even the most trained speaker when he gets onto the stage get this anxiety, this is the normal adaptive thing, to avoid this you prepare well, you study well, you reach in time, so that you do not miss your exam, you keep yourself healthy so that you can you take all the precautions to reduce the threat of damage to it. So human as I told you normally functions to remove the threat and keep you safe the pathological anxiety.

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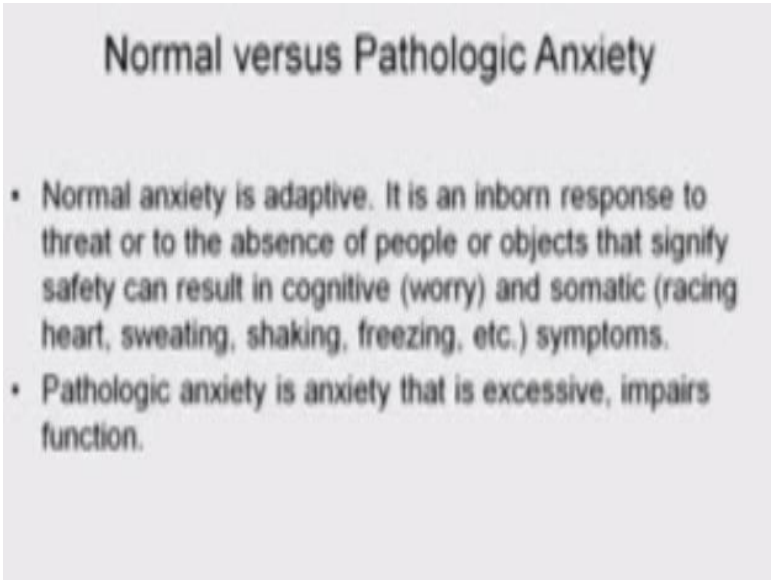

Is excessive and it impairs your function so if it is often said that anxiety and performance, have almost what you call your archives, dots and curve which.

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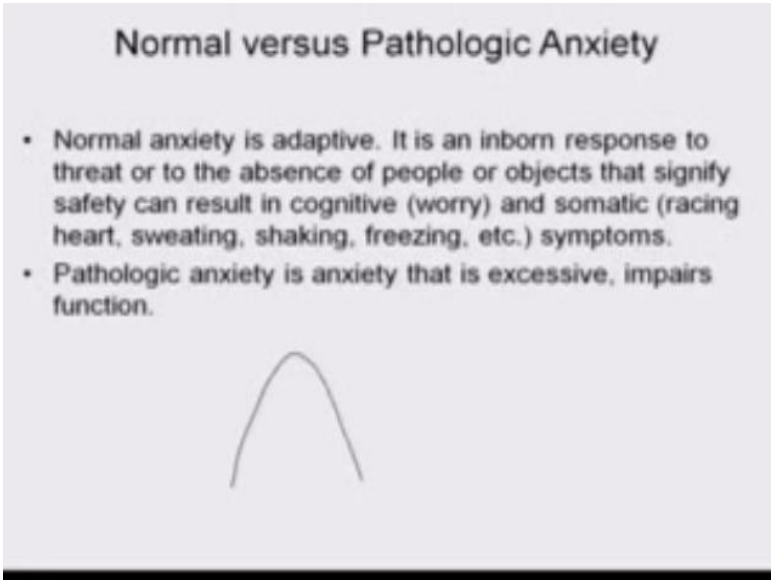

Like this so as anxiety increases.

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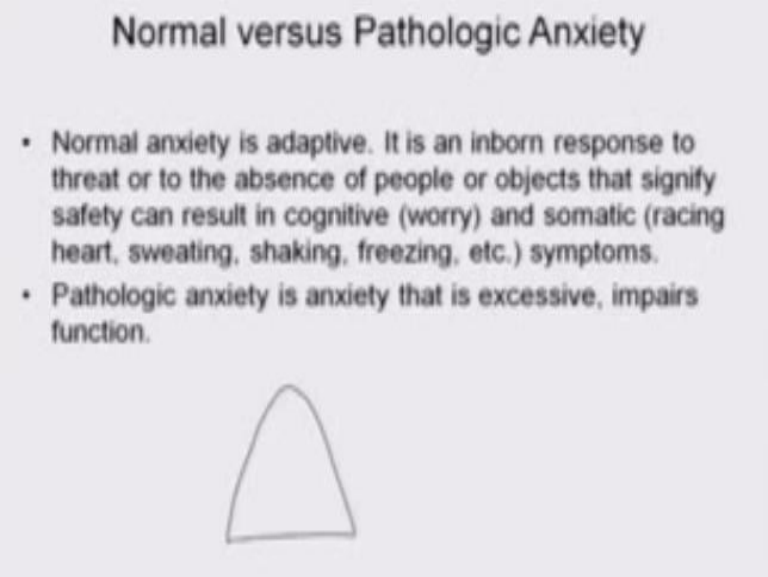

That goes like this.

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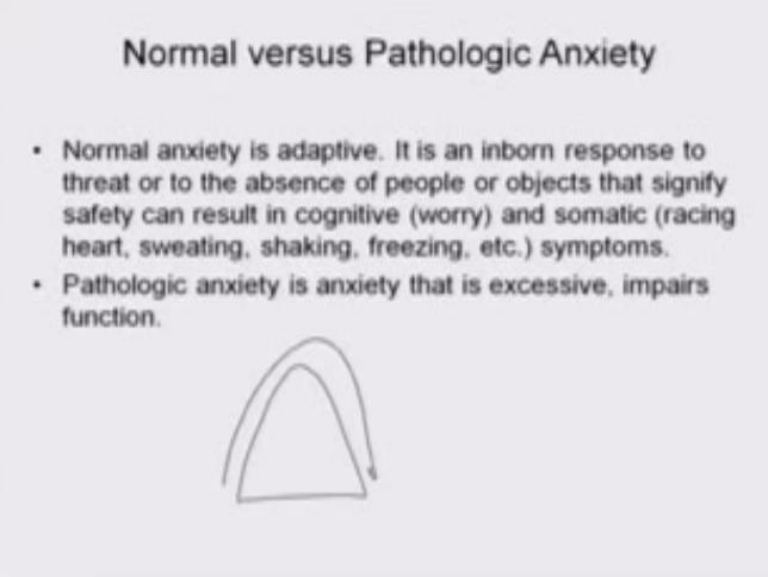

Your performance comes down a little bit, of anxiety here the performance is going up.

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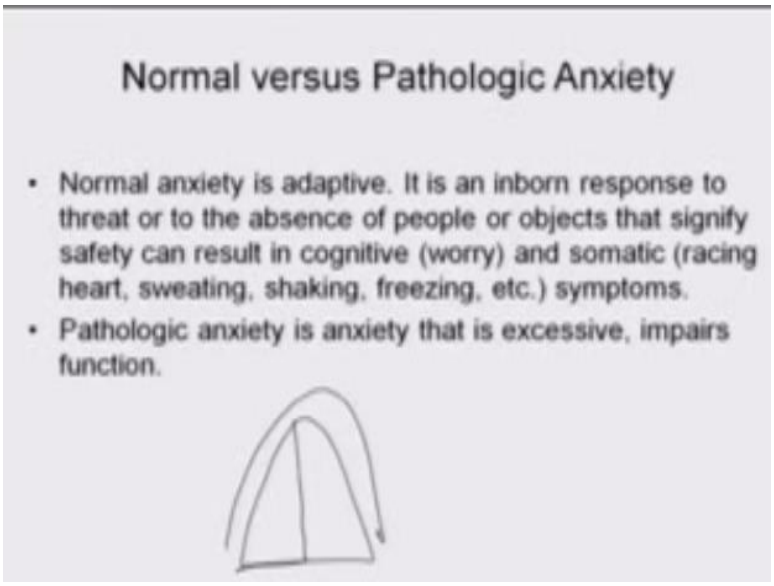

It increases certain more it will come down.

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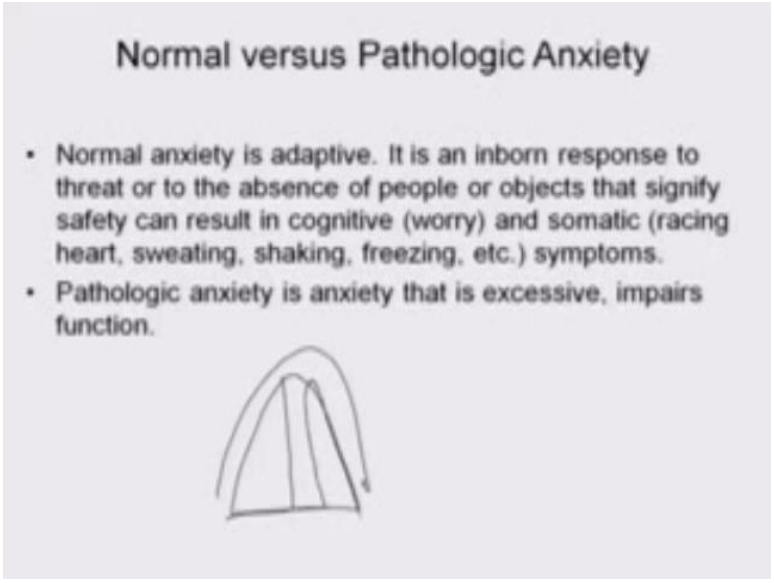

So having said this now you know what anxiety is all about, so then you can ask me whether anxiety is a illness for some, it is excessive anxiety to a small insignificant

stimuli or absence of stimuli or even to a real threat which impairs your functioning is calling anxiety disorder a larger time. There many subsumption room into it so what do you find with things are very disordered that that it has a early onset.

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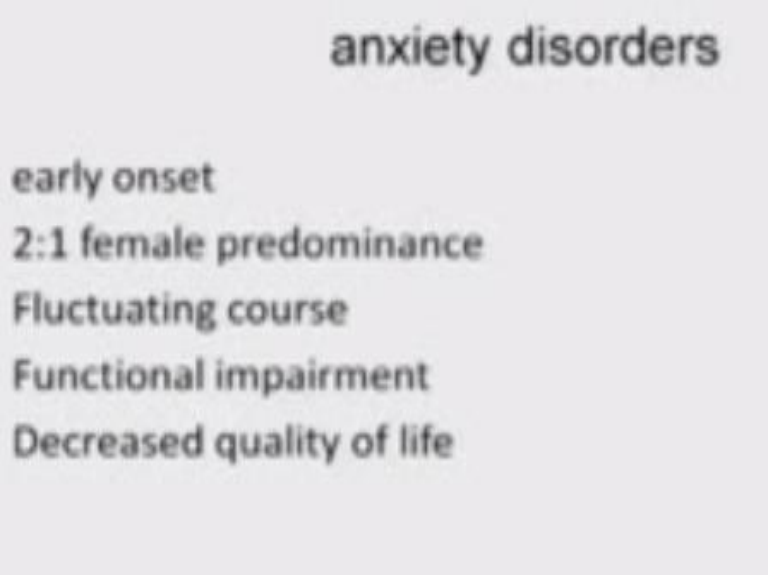

There is normally 2:1 female predominance now, whether this is biological or has been induced by the way females have been treated, in the history is something which is debatable. This is a fluctuating course anxiety and like schizophrenia is not permanent, is not going on and on and on, it is it comes down, comes, goes, improves people, survived they again have this.

There is a lot of functional impairment when anxiety is high and the quality of life is imagine and all the time if you are apprehensive, slightly shaky, you do not know what is happening it can lead to lot of impairment in the quality of life.

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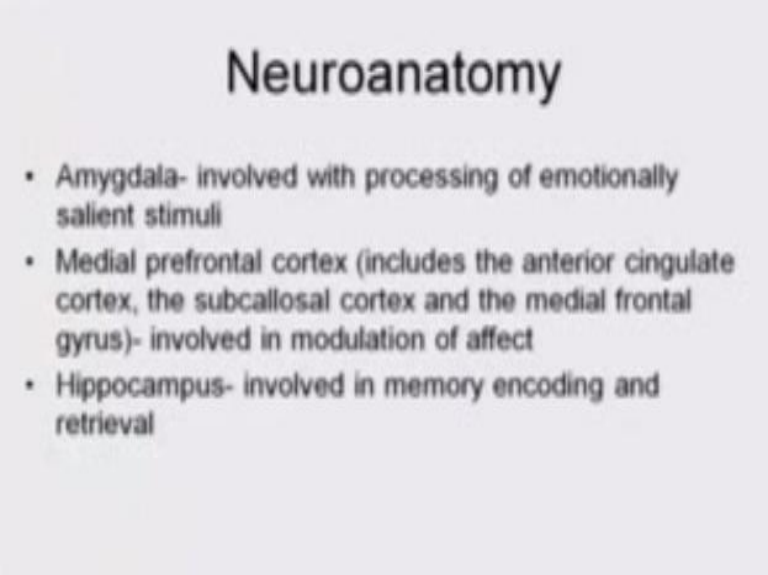

This is one of the rope not we have not been able in spite of the best of the imaging and electrophysiological functional MRI is given us huge information, we broadly know which areas in the brain control thought or where does the thought process, but all that is still very weak, we still cannot pinpoint otherwise we would have formulated devices to tell you which may be to me, come up in next 20 years but the robust finding of neuroanatomy and neurophysiology and neurosciences is.

There is a structure call amygdale deep thought deep into the Midway into the limbic area which is involved with the.

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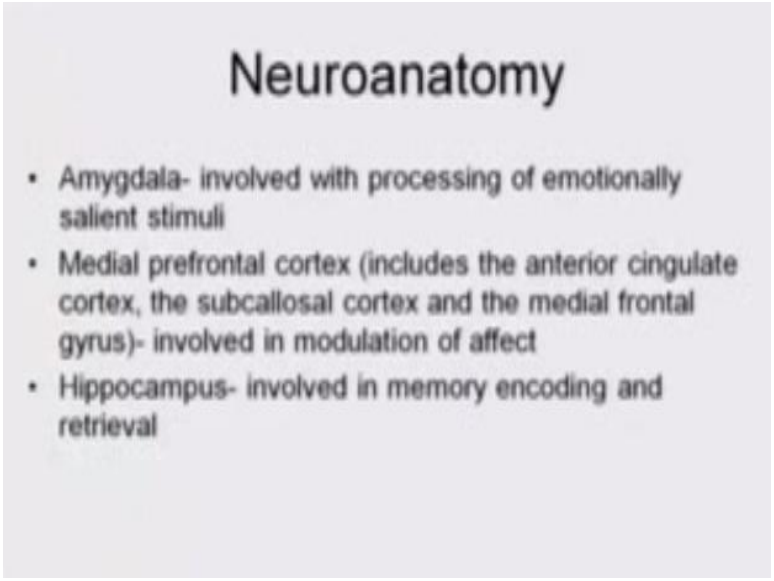

Processing of emotional stimuli, so if that anything external which comes, if the salience network, the network of the hair particles enter going down to the limbic to the emotional area senses that something is threatening, and this is this, has come from revolution, so this three area which.

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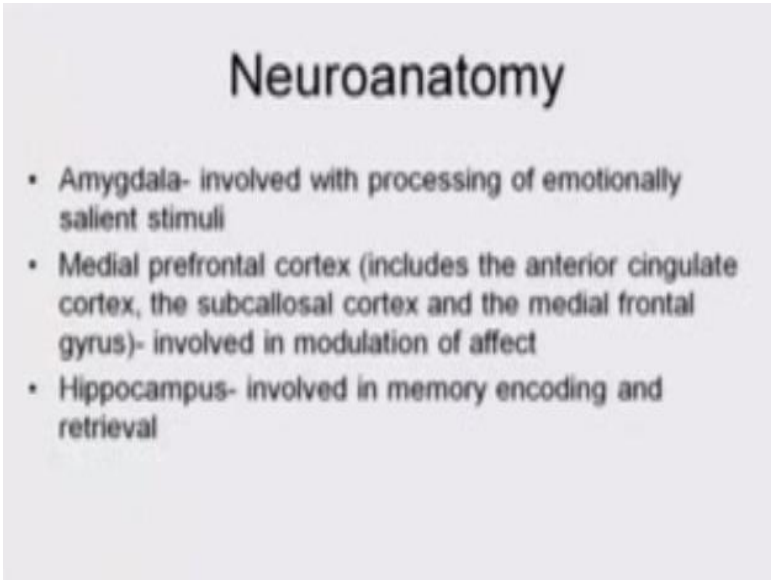

Amygdala medial prefrontal cortex which includes the anterior cingulate cortex, the subcallosal cortex and medial frontal gyrus and hippocampus where we talked about him hippocampus in memory and we were talking about dementia and the damage to it. They are involved with processing of this stimulus, so if Amygdale takes some feature and senses it through the comparison with the memory encoding.

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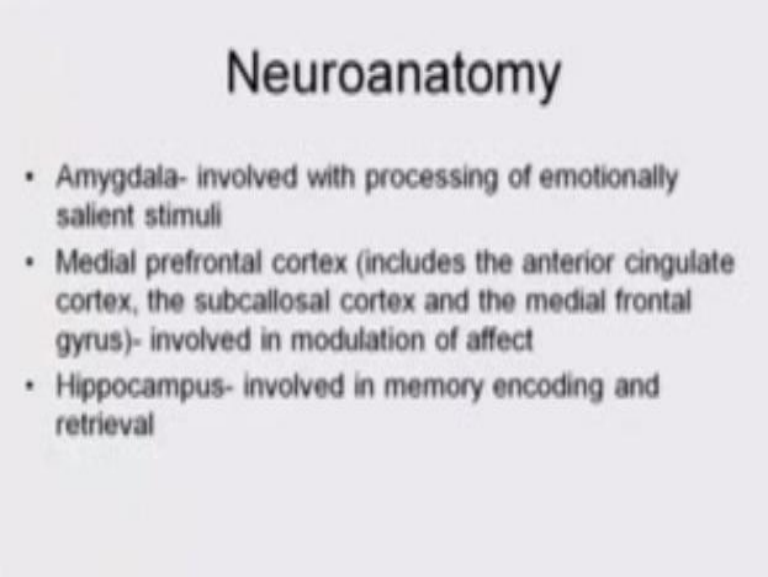

And it feels dangerous it was suddenly induce fear the fear itself will be controlled or not control is done by these areas, medial free prefrontal cortex so this is the whole circuitry this circuitry probably fires or misfires in people who have anxiety. If it fires in the weather it keeps in touch with reality and keeps you prepare and your, your hair centers are able to control this hyper vigilant and arousal then you are able to function as according to that car but it goes beyond control, the whole control system goes into a sort of detrainment.

With these symptoms and these features of your mind take over there now you can ask me whether this is also psychotic because obviously you know you should be

functioning, but you are anxious and you are not functioning so it is it a loss of touch with reality.

It may appear as a loss of touch with reality but it is not because the anxiety is preserved, your mind all the time known while this is happening especially the panic attack where you feel that you will die but you are feeling but you still you are dang where as if I schizophrenic person, a person with schizophrenia, hears somebody talking to him he will believe that voice.

He will believe that voice so that is called anxiety all anxiety.

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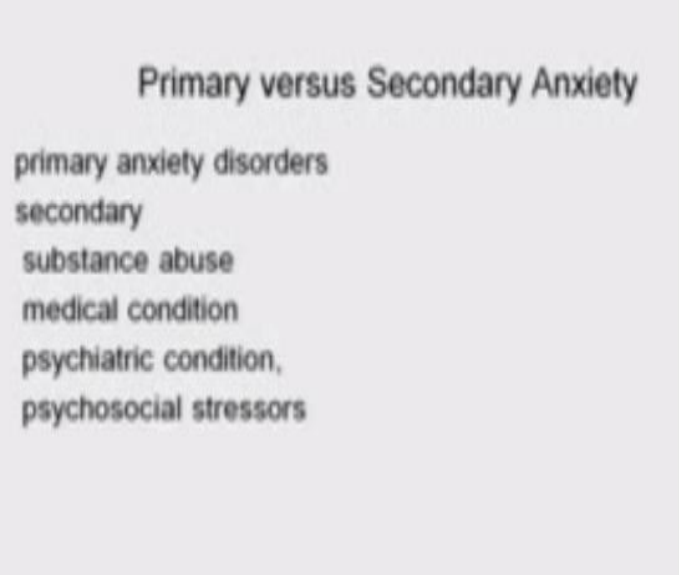

Is preserved so when you look at it is, the primary was the secondary, the primary anxiety disorders secondary can be seen with substance, abuse with alcohol with cannabis medical condition there are certain conditions of heart where symptoms actually is it tachycardia is something called PS, sweetie paroxysmal supraventricular tachycardia which can send you on the fast beating certainly.

This can mimic overlap anxiety medical conditions thyroid hyperthyroid psychiatric condition other psychodrama.

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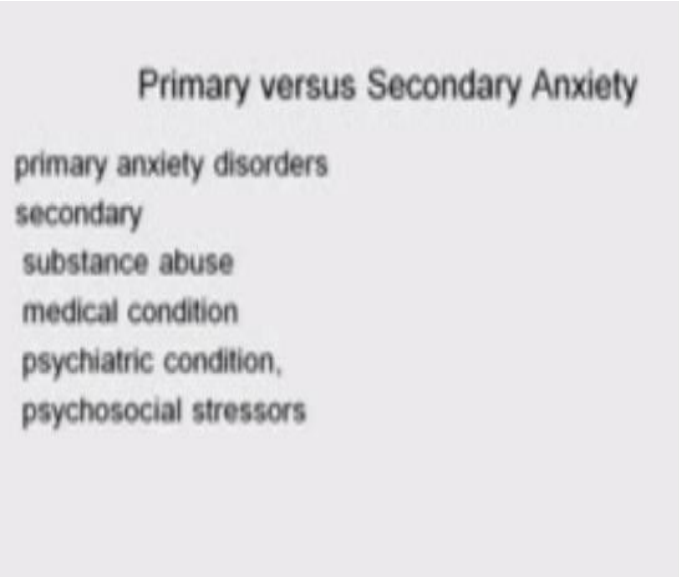

Our patient with schizophrenia can have anxiety; a patient with depression can have anxiety and psychosocial stressors.

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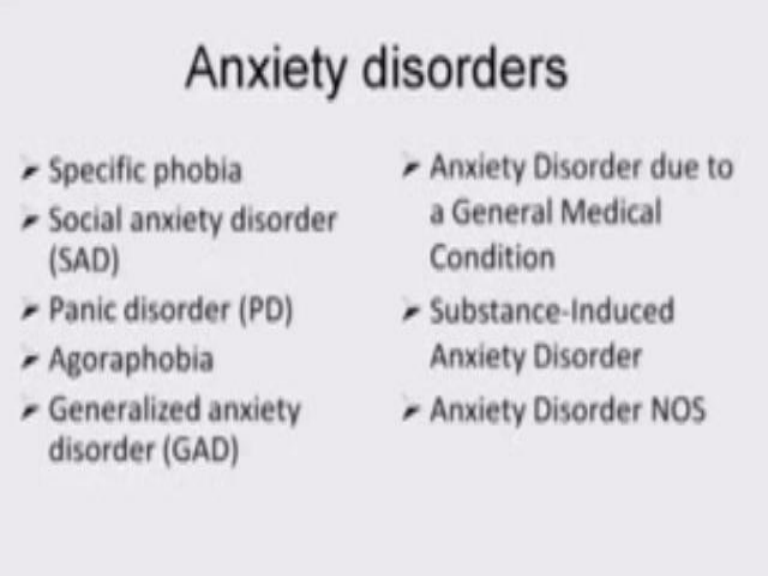

So what are they anxiety disorders are you would have heard all this time believe me you would have to call phobia. Phobia is excessive irrational fear of a situation where it can be cumulated. Some people are fearful of closed lifts or closed rooms so claustrophobia is a whole list of it, is often asked in general knowledge questions of heights, something called agoraphobia. There is something called panic disorder.

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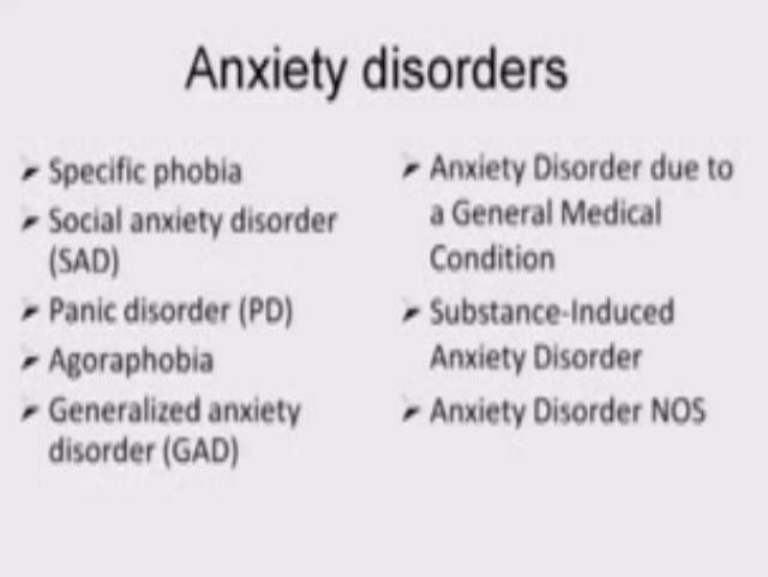

Social anxiety, anxiety disorder to general medical condition so phobia's are some of the genetic like blood phobia and social phobia which can lead to something called social anxiety disorder all of us when we are going.

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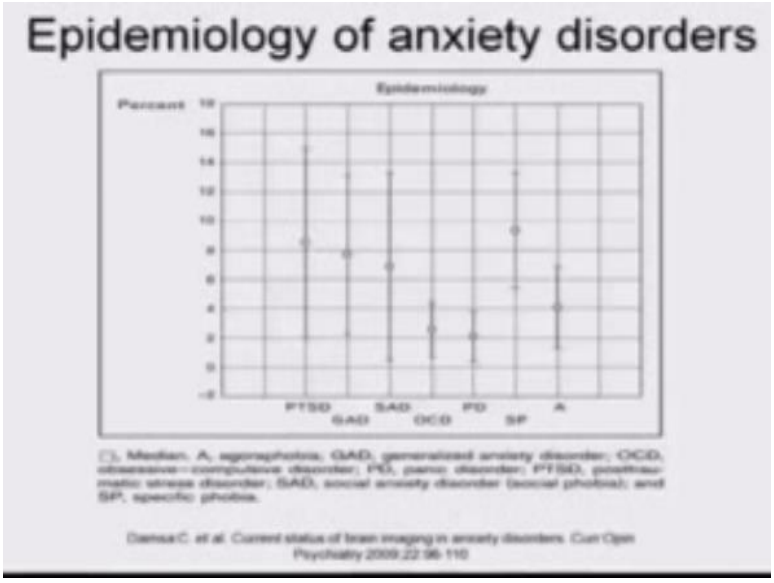

To have certain amount of social anxiety but with some people it becomes a social phobia. So phobia normally is characterized by irrational excessive fear, even if you think of that situation you can start feeling anxious, this color anticipatory anxiety and because of this people tend to avoid those situations like somebody is fearful of height they always avoid going to that place so this award is behavior anxiety, whether that for phobia is in real, that queue is in real, that the stimulus or situations in real or in your mind can always create anxiety.

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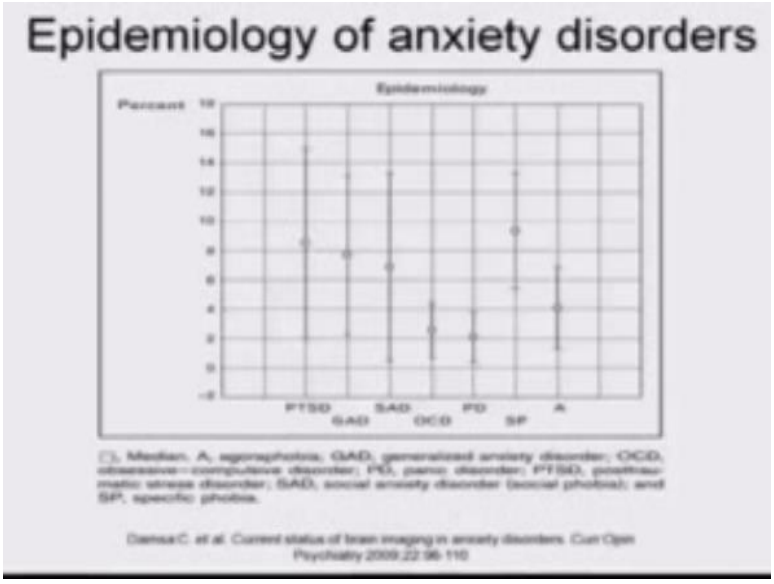

This is just a chart showing the distribution of anxiety disorder.

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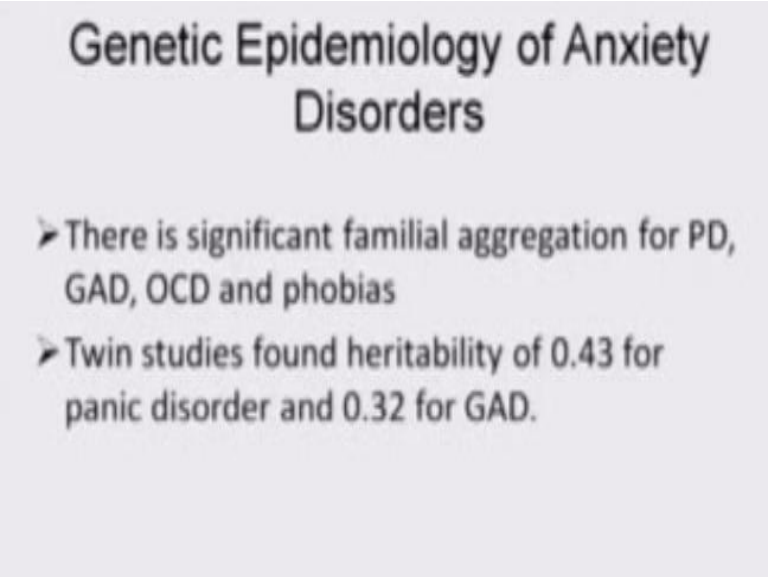

So for panic disorders generalized anxiety or OCD obsessive-compulsive disorder, we will talk about it in the next chapter and phobia's with the significant family history so people who develop all these illnesses, what has been found that there have been history of people having similar are sort of I spectrum from mild to moderate or different type of connected illness in the family.

So this heavy genetic loading to in a study is found of .43 for panic and 32 for generalized anxiety disorder.

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A specific phobia’s communist.

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Snake

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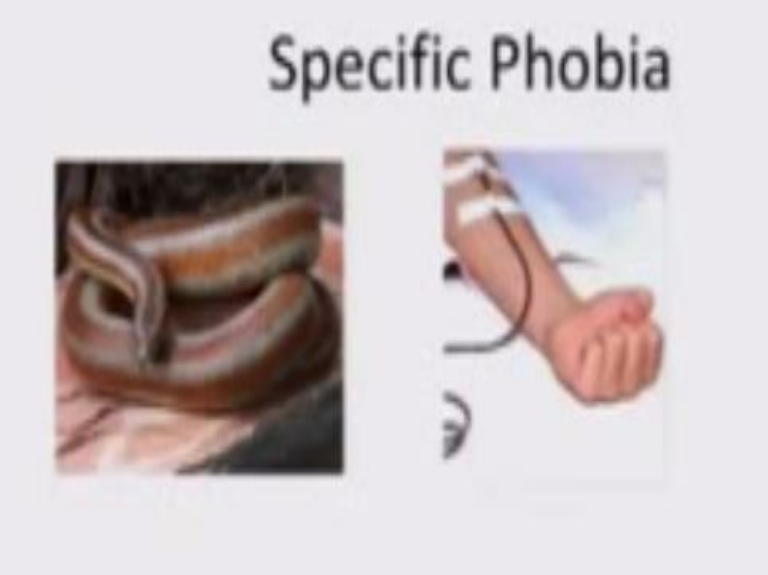

Blood, you have seen people seeing blood and going dizzy and falling down or with the snake there panicky.

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Or with closed spaces.

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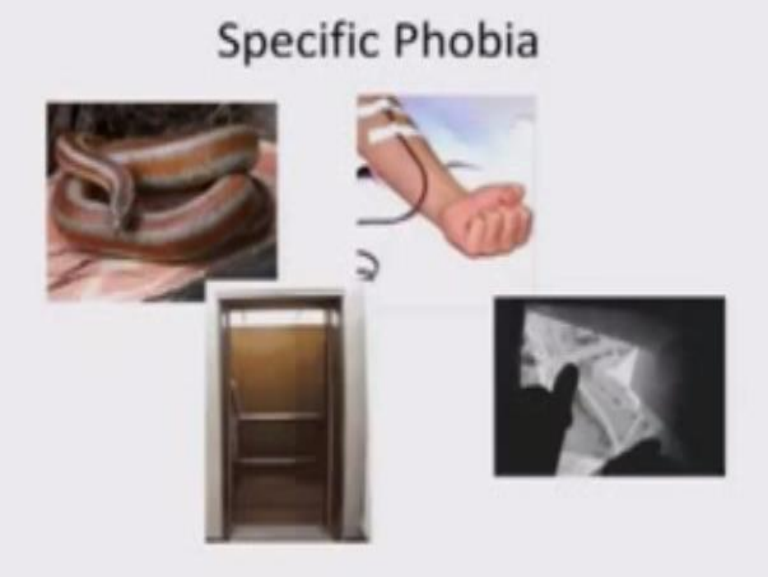

Or height, you would have seen a film called color what I go by L French cock is a typical case of fear of heights this is a model persistent fear.

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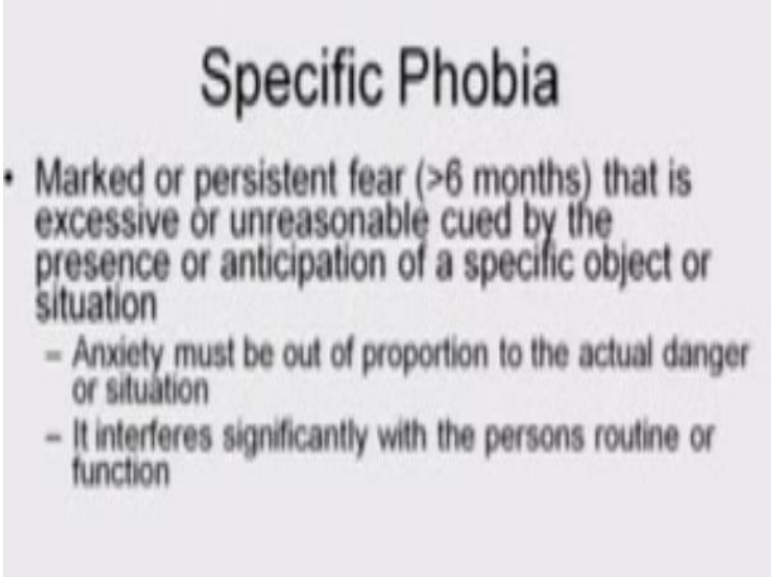

Which would be more than for six months now it can have on set any time some people are fearful of traveling in an aero plane, some people are fearful of riding the train, accessible unreasonable cured by the presence as.

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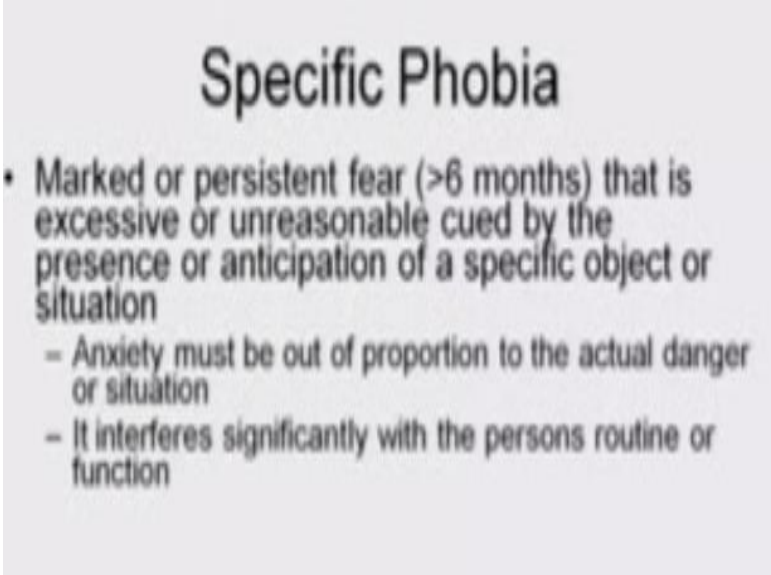

I said or anticipation of the object even if you think you will get fearful anxiety must be out of proportion to the actual danger, so even if even if you go to a height or your close in a lift, or you are caught in a market, agoraphobia typical and they all onset panic attack, agoraphobia is we are going to marketplace and suddenly you, your mind tells you that what if the whole thing collapses.

What if there is a crowed and cannot escape nothing is happening, it is just the hole the geometry of the place that that pattern of the geometry probably it goes into your brain and tigress of now, it is possible that sometimes for the there are learning theories say that always learn it, it is possible that some point of times snake may really crawl over your leg and that would have induced sudden anxiety in your head which is saved in the memory.

So even if memories are formed by reverberating circadian lot of rehearsals and in the brain, and brain firing and consolidating and changing synapses, it is not like something called posttraumatic stress disorder, with the sudden natural calamity or man-made calamity creates such amount of disturbance in your brain that synapse alter and that is a memory like we saw in hippocampus and every time the salience network sees that thing.

It will trigger and compared with the memory and the memory will tell the AMYDALA that this is the thing which was fearful AMYDALA will start a fear response our rage or, so this is always electrochemical circuitry which is.

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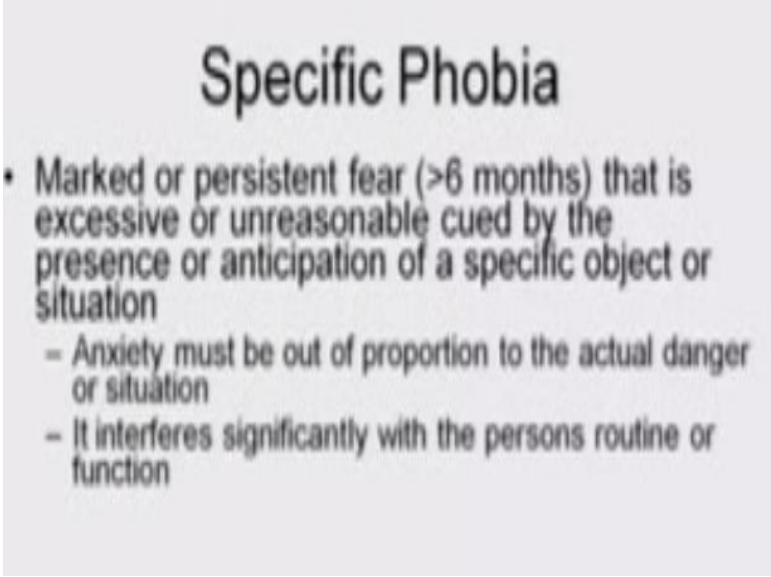

When we try to treat the drugs and improve the firing patterns and all.

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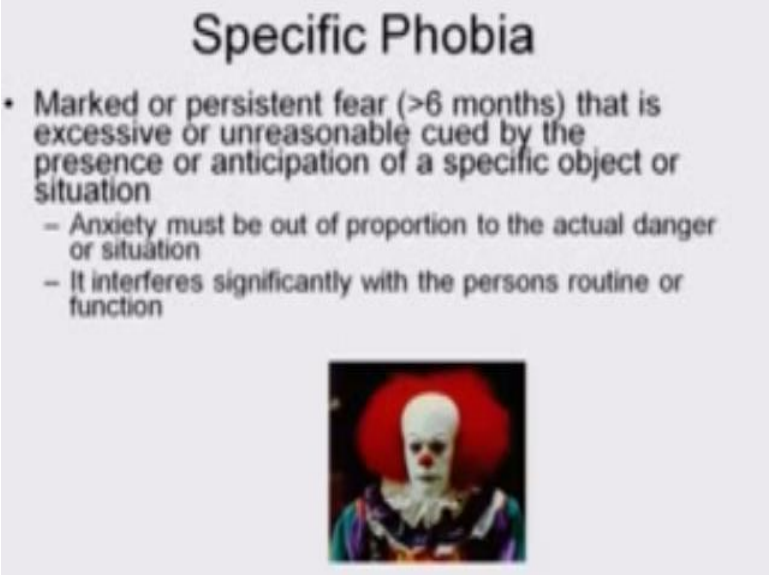

And it interferes with the person's routine.

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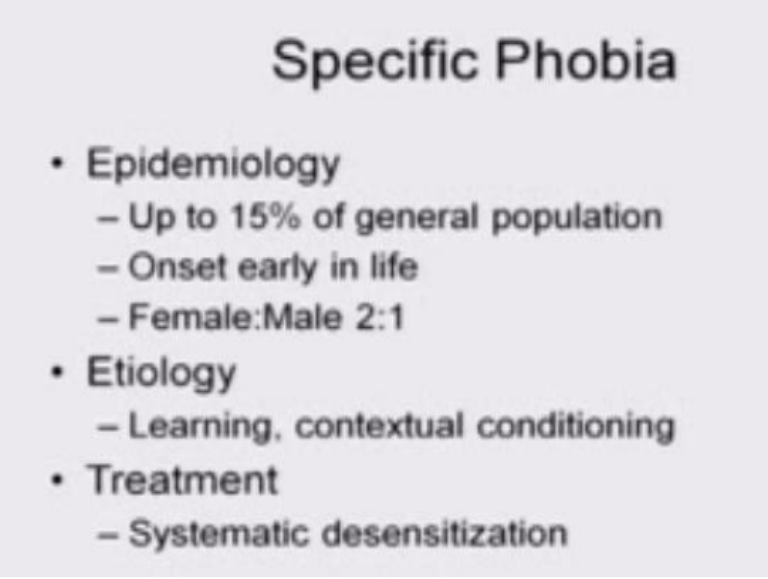

15% general population, the huge number early life females again more than that it only as I said it is a learning or contextual conditioning, so it is a response which the brain has learned and because the brain has learned this response, that is why it every time in response to that, some of the actually the treatment which we call a systematic.

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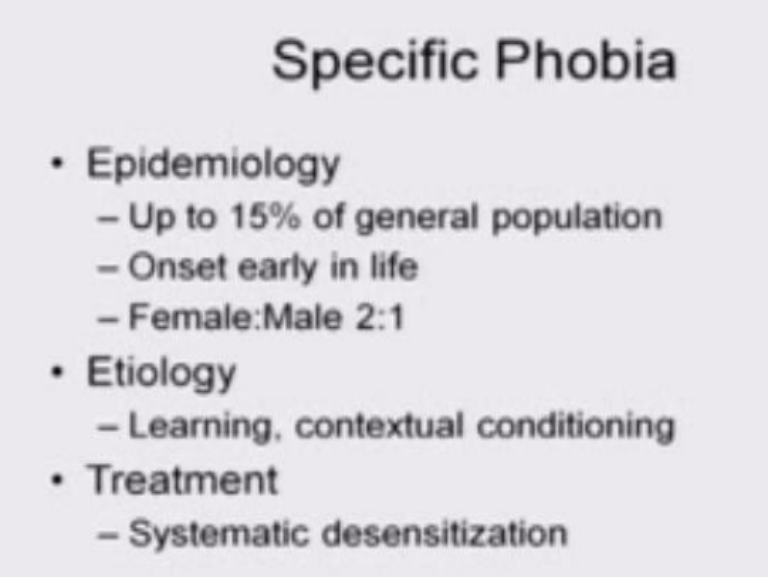

Desensitization so look at it the word itself explains the whole thing, the explanation is that the mind is sensitized to ascertain queue or object whether in real or imaginary and every time the memory and the Amygdale compare it with the pre-existing memory, it sends a panic attack or serious anxiety of.

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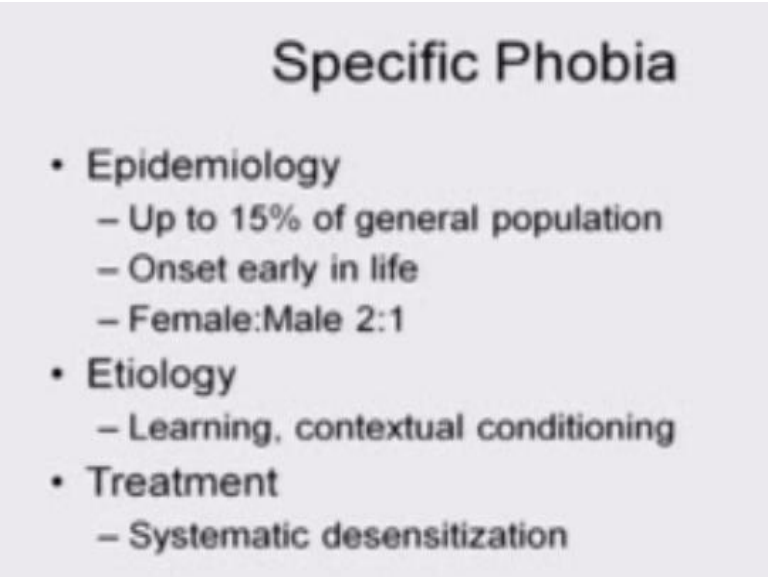

Whether physical or mental kind, so what you have to do apart from makes sense will talk later, you have to see what is the ABC like the antecedent, the behavior, and the consequence. The antecedent is that queue imaginary or real behavior is anxiety or escape from that or avoid that situation, the consequences you save that anxiety if you do not expose yourself.

So what we do is called systemic decent weekly and they normally do not occur in a single phobia, they can be multiple, you so create a hierarchy of list of the situations where the person feels anxiety and train the person to desensitize from that queue and as they move on to the hierarchy they will come to a situation where therefore we will disappear.

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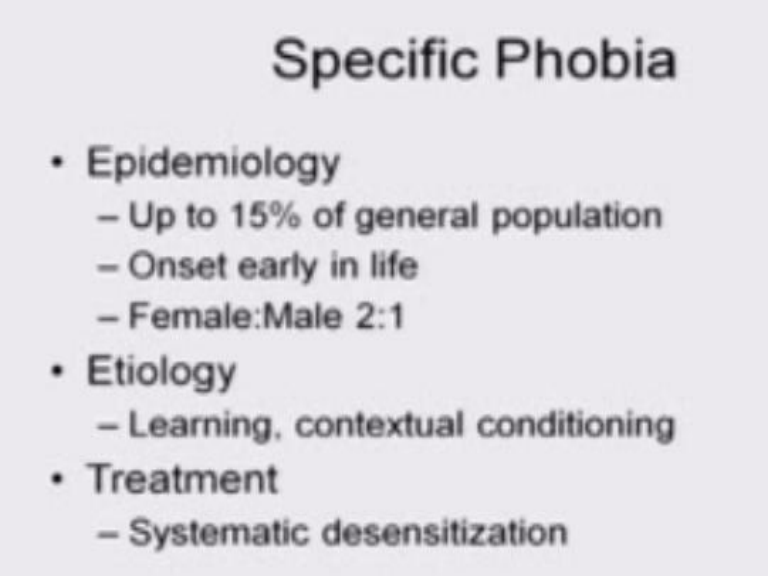

Psychologist knows this is one of the most common techniques.

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Social anxiety disorder.

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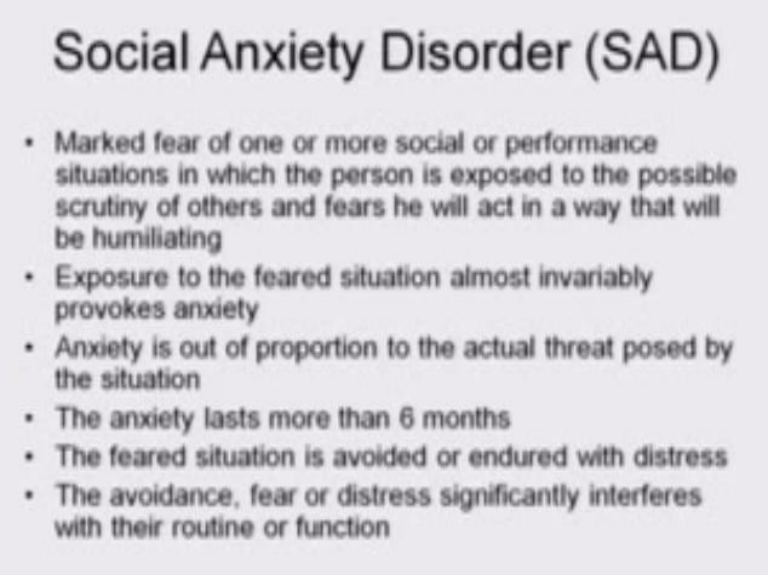

We all when we are developing develop during the developmental phase develop anxiety of performing of meeting people socially, but most of us go through it, we just overcome

it and move on in life, but people who have social anxiety which can almost go to social phobia at times, when they started avoiding like other phobias they have this fear that when they are talking to somebody, when they are meeting somebody they always fearful that they should not say something or should not do something which will embarrass them.

Is like looking at yourself from the eyes of others all the time and this behavior once sometimes in one or two situations, all of us undergo this but when it becomes a disorder then people avoid situation the more they avoid see all anxiety disorders are like self for propagating the more you avoid the fear becomes more established, the more you were meeting people the fear becomes more established the every time you give exam and you start bothering about the result rather than the performance it certainly gives you a panic attack.

And that anxiety overcomes your normal functioning of the brain and you perform but this are the lot of kids from you and you will know who study and mothers say they are studying well but they do not perform. Some of them have performance anxiety when they see the paper the whole mind goes into a dizzy and the really do not know what to do, again it is a learning biological circuit and pattern of fighting which goes on and on every time it happens. Exposure to the fired situation as I said is almost invariably.

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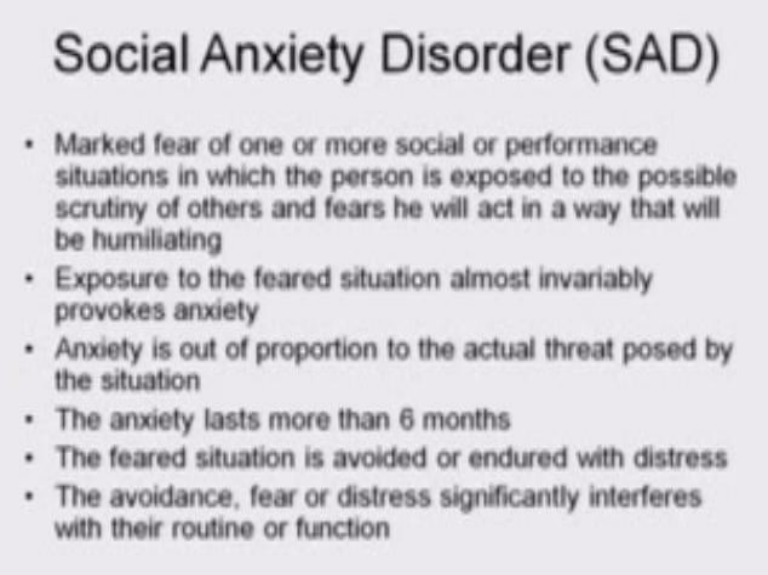

Provokes anxiety out of proportion and that is for diagnostic purposes we say it is more than six months again it is socially, but lot of these people have they are not able to perform to the potential, they are not able to mix freely now here when we are.

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When we are talking about social anxiety we should differentiate it from another illness call this card which is part of personality disorder we talk about personality disorders if

we get time. Schizoid personality people also do not meet people and they are mostly in their own world, they are adults, they are different from autistic kids, they interact normally, they can talk normally, they keep doing the work, but they do not have an inner desire to make friends.

So their social circles are very, very limited. Controls this with a person social anxiety who wishes to meet friends and is always aware that is socially isolated wants people but is not able to make, because every time he steps out of his own self but every time this person wants to interact, this social anxiety are being just from the eyes of others, of being fearful of making some embarrassing more intense stops him and that perpetrators till it becomes like almost socialist version so this is a pretty.

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High incidences of seven percent and teenagers mostly have it most changes grow out of by 13 and ninety percent by years 23 and obviously when you talk of increasing depression it has to.

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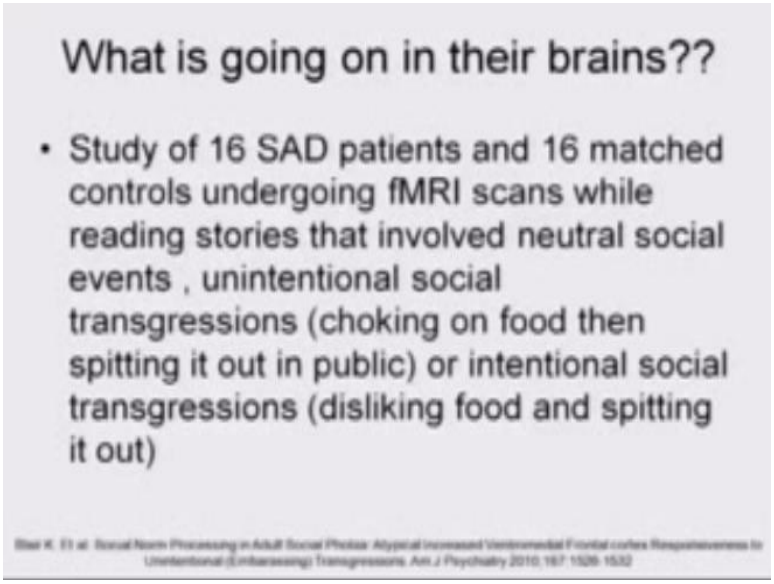

Because if you are socially isolated because whatever we know of human brain one thing that is certain that human beings are social animals we all know it, and social relationships being in close contact with people being having a trusting relationship being able to express yourself freely without the burden of somebody judging you all that is human right, from my childhood from your early first day in life till all your life to the end of her life all of us need validation from society, from friends from people, people will accept you as you are, imagine a you may just misery for these people.

I schizophrenia patient is living in a different world not able to perform it still has not having lack of inside depression miserable feeling of sadness was then that is anxiety because you know you can do it you know you have nothing which is inferior to the other person you validation love but you just cannot open yourself if you look at the FMRI try to compare with what they are saying.

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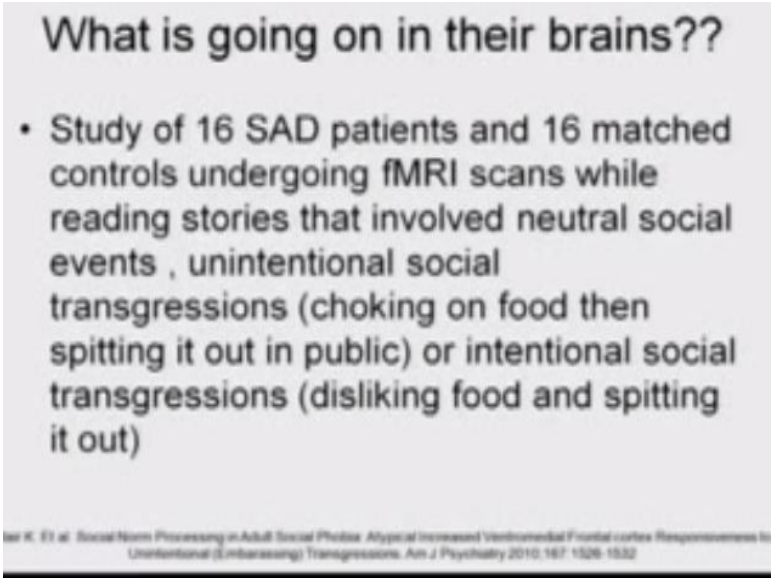

They while reading stories that involve neutral social events on in intentional social transition choking on food then spitting, or in public, or intentional social transition okay both groups had increased activity in medial prefrontal cortex in response to the intentional related to unintentional transition, however showed a significant response to a unintentional they also significantly increasing the Amygdale and insular, as I said now insular is size one area so this area we mention.

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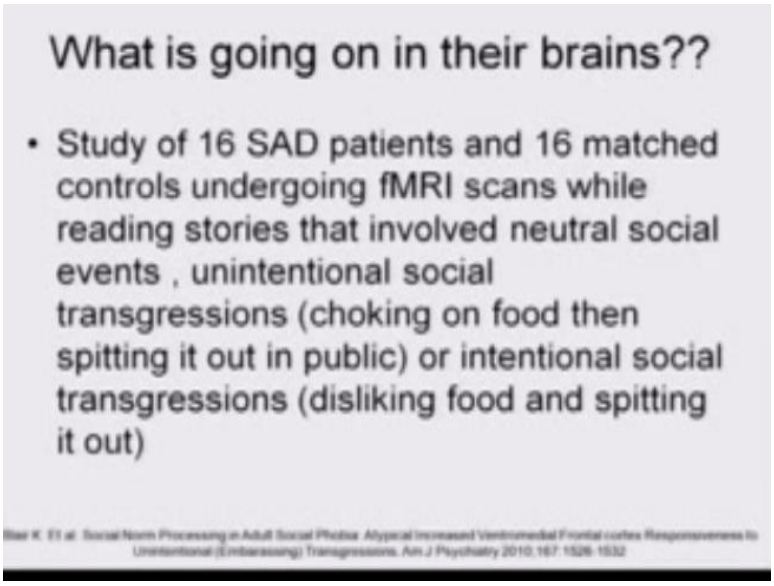

So when you are looking at almost indifferent like eating and you choked and then you spit out on public order the International President disliking for and spreading it out you eat and you say do not like it.

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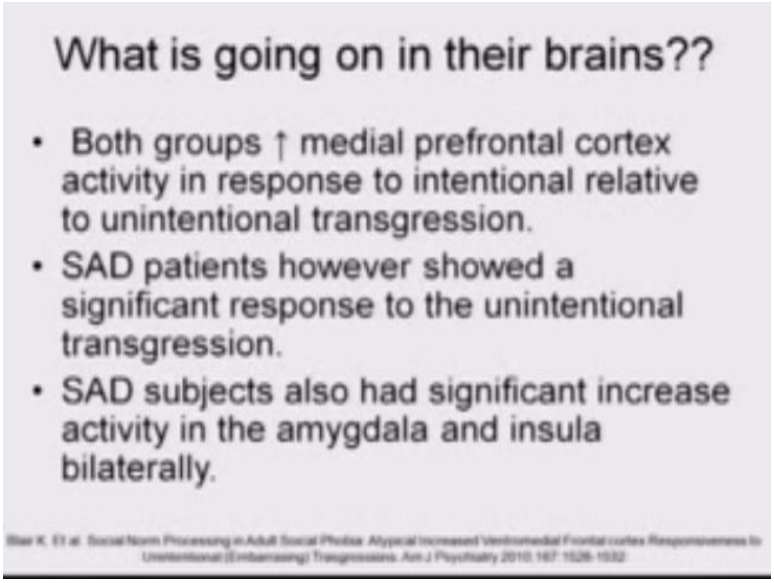

The difference between it so these medial prefrontal when there is intentional transmission right because it is trying to control the modulation, but unintentional transmission also keeps them slightly on the edge. Insular is one area which as I mentioned if you remember while we are talking about the anatomy which talks and the whole investigation indicated that this is the area which controls empathy, the mirror neurons.

Empathy may be a higher cognitive emotion mirror neurons this area tells you to read the emotions of the other person whether it is even if there is no verbal indicator you can still make out what people are feeling so insolent hyperactive because already, already on the edge in social anxiety always reading the mind of the other person trying to see what is the expression of the other person when they are looking at me.

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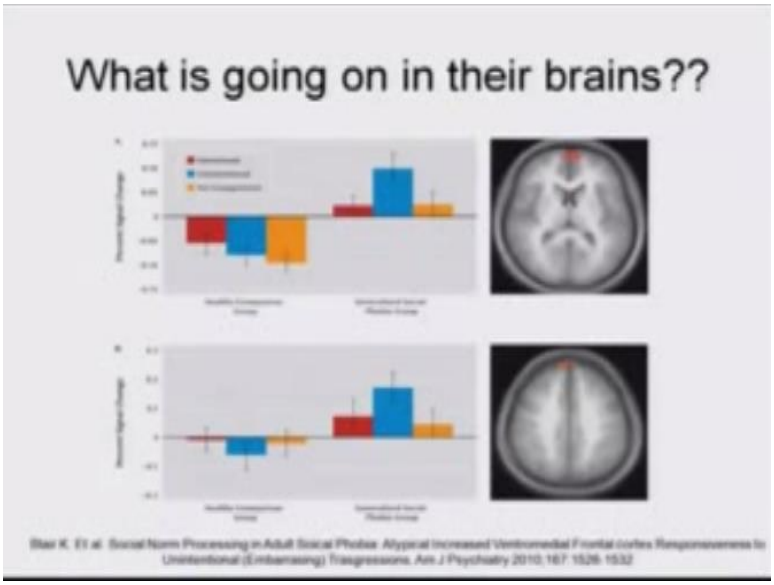

So as I said this is the other FMRI things they have shown hyperactivity of the Amygdale even with, with the weak form of symptom provocation the only presentation of human faces so even if the presentation of a human face can trigger off, it can it can just trigger of whole anxiety thing because that is what is the problem they always cautious that they should not do embarrassing thing, which will separate people from them so it is like a non-productive thing you want to make a friend all the time you are worried that I should play to the gallery.

I should be like this the show that the other person does not leave this creates a huge personally always on the edge and you end up doing something and you become more embarrassed next time you get almost four big bird you almost awarded and that creates a cycle of social withdrawal all isolation and depression.

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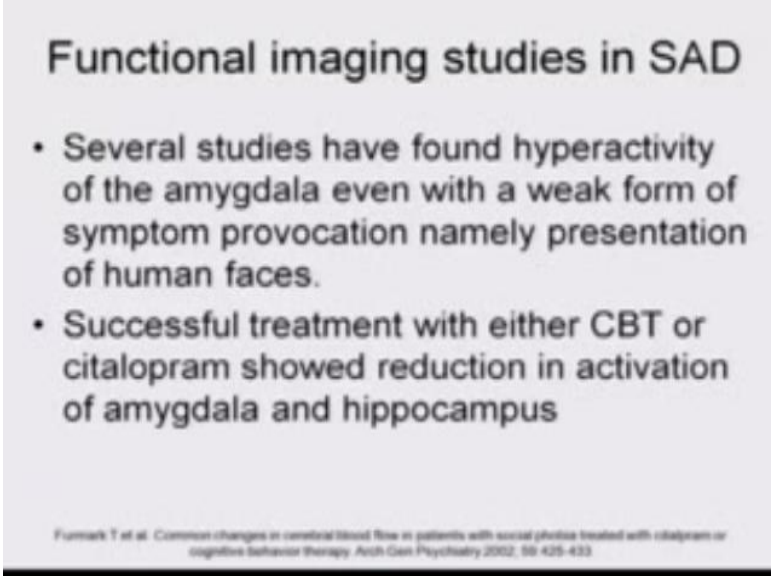

So the treatment is like one drug is called Stella prom will talk about the drugs which are very common drugs are cognitive behavior therapy which also shown reduction in the activation of a metallic program because this is a proof for learning theory that a hippo campus and Amygdale make that they have learned to avoid this situation to be anxious in social situations this all a learned behavior which may have happened or may not happened.

If you train these circuits train this circuit then the activity decreases over time this is a prove that the mind can be trained we may not have been able to find out things for schizophrenia still but in this thing.

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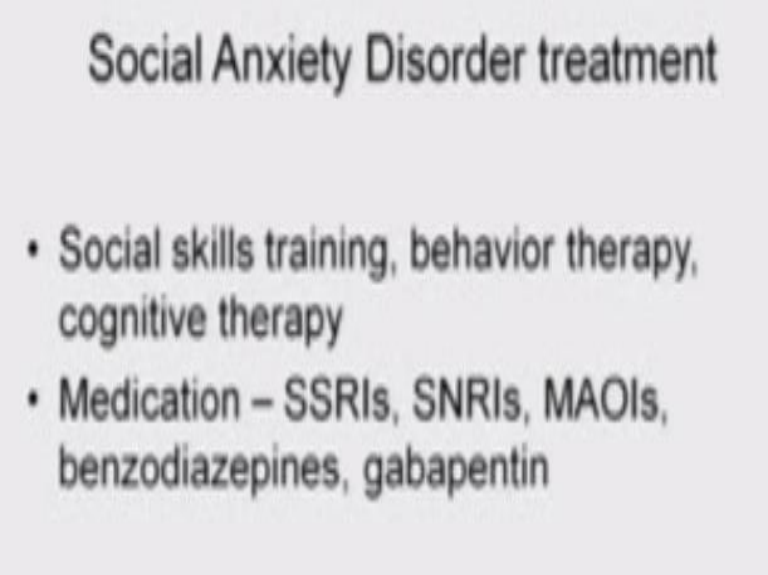

Social is constraining behavior therapy like exposing, yourself to a situation and awarding the response the response is run away you expose a personal social situation train him to tolerate the anxiety not one of which is the normal response and by repetitive exposures this responsive running will decrease and solvent anxiety social skills some people stammer in such situation, some people I avoid situation because they feel they cannot assert themselves are put the idea across.

There you have to teach them they are effective medicine and cognitive therapy obviously is a part of treatment as we have talked before which.

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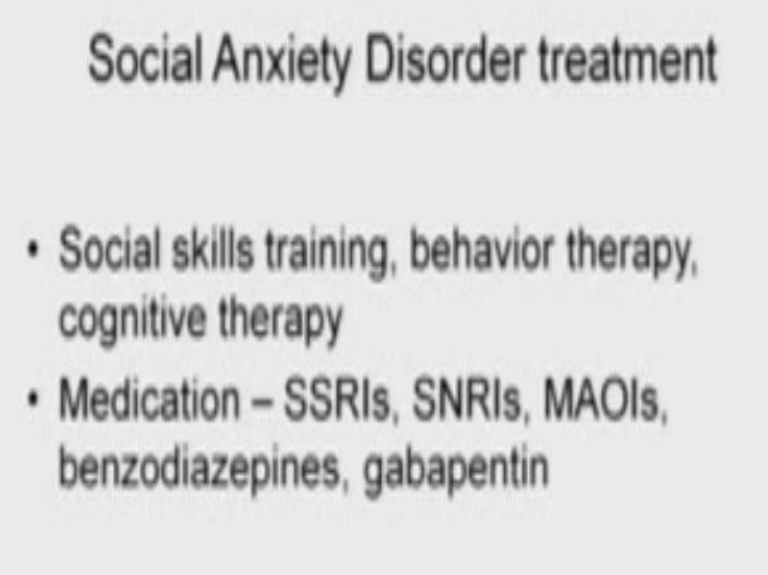

Trains you to alter your thoughts of these mines normally magnify I small look at some bodies face which may be just a nor course thing and if this and if somebody is looking face to face their mind might take it as a over this person does not like me magnifies so this minimization magnetization magnification the selective obstructions when you are anxious you look at things which will fight any anxiety.

So you will not really bother too much key ok this is like let it pass of the cognitive therapy helps there by altering your thoughts cognitive operations medications are as I said we can talk annuity depression these are.

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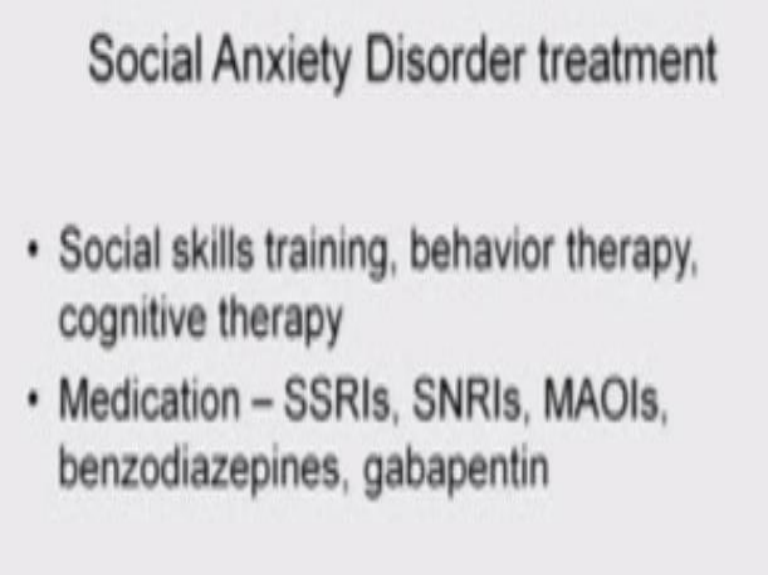

Group of medication which helps decrease anxiety benzodiazepines is a group of medicines it is a comments if you were heared alprazolam, diazepam, clonazepam.

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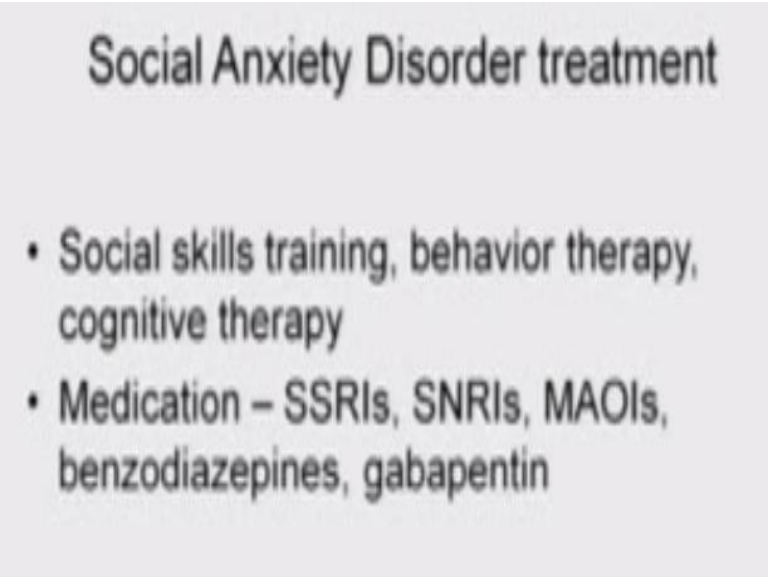

SSRIs selective serotonin reuptake inhibitors SNRIs the selective serotonin norepinephrine reuptake inhibitors mono amine oxidize inhibitors not all this drugs are

chemicals synthetic chemicals it go in the body are absorbed go to the brain, act on certain chemicals which have been implicated in anxiety disorders some of them are also implicated in depression and other illness called obsessive-compulsive disorder which we will talk about.

So they are given in different doses depending on the severity and the duration which a clinician can decide when does the pins are not a long stay treatment but till the model medicines where develop they were the only medicine they immediately help in anxiety so lot of these people they almost become dependent, on that because they know every time you feel anxious to pop one benzodiazepines and it will immediately decrease because benzodiazepines work through a chemical called GABA.

You would have heard this word previously the GABA is an inhibitory chemical, so what is the problem in anxiety is the hyper arousal and activation GABA which comes only mainly in the cortical layers decreases the activity so GABA any drug which goes increases the GABA actually decreases the firing of the other neurons which in turn decreases anxiety where as these medicines they go and alter the chemicals through which the firing patterns are decreased.

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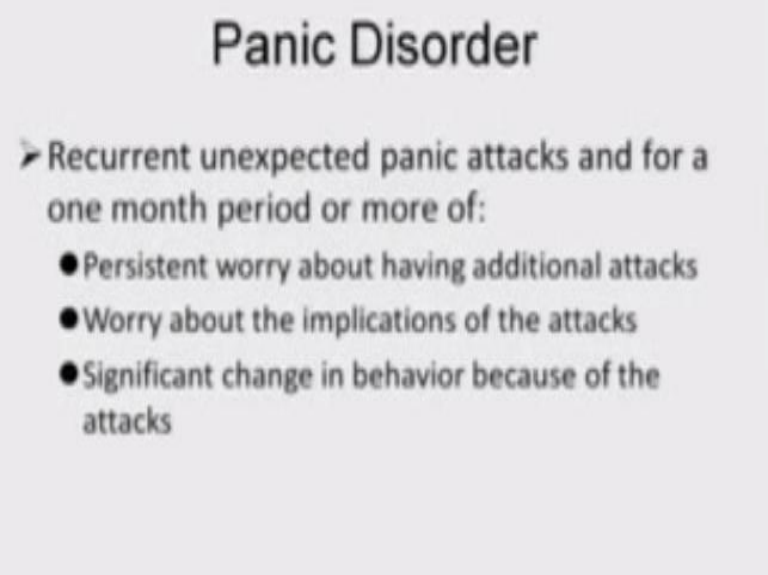

Panic disorder is a recurrent unexpected panic attack and for one month period of more persist, so as I said anticipatory anxiety worry about having it worry about the implications significant change in behavior.

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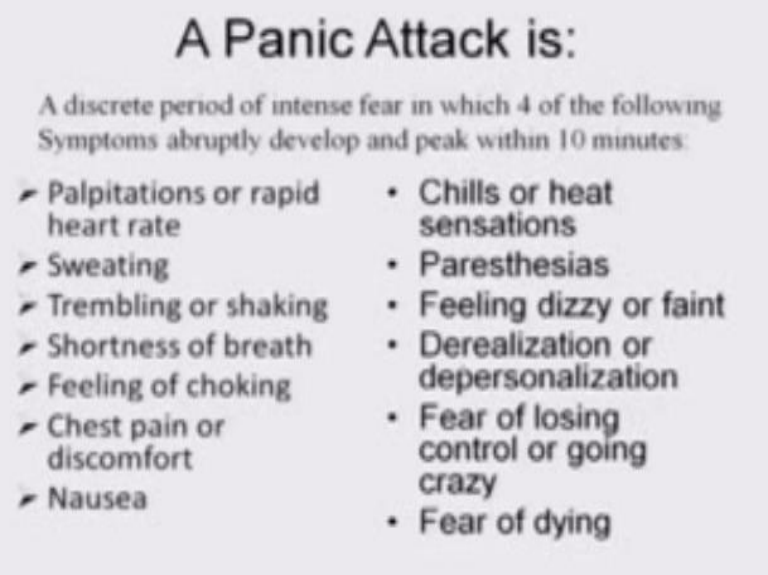

Panic attacks are very, very typical and it there it incapacitate almost, lot of cardiologists see panic attack a person certainly feels or lasting within 10 minutes say severe feeling of

anxiety, palpitation choking trembling and they feel as if they are dying cheats pain cheers derealization they feel as if something has changed and it settles down, fear of losing control.

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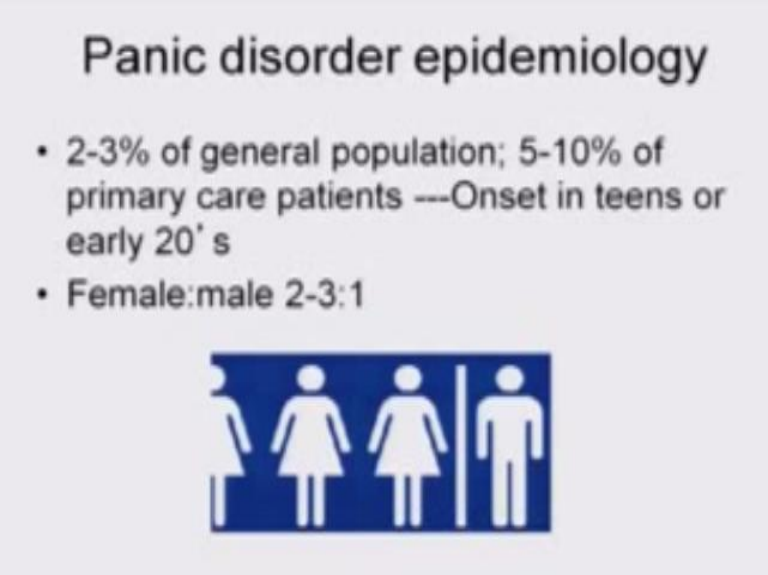

It can settles down in 10 minutes but what happens is that people get so agitated that the panic attacks settles down but it is a like a tail which goes on and for two hours, so it affects 2 to 3 person of very thing.

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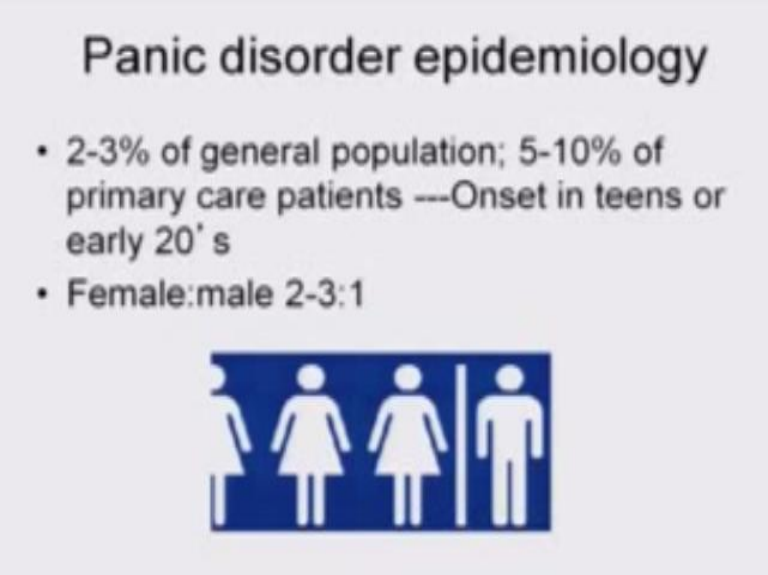

It is a intense fear of dying with this physical anxiety choking trembling paresthesia the derealization that nobody dies of panic attack, but in panic attack people can jump and part themselves so it is a very common thing two to three person.

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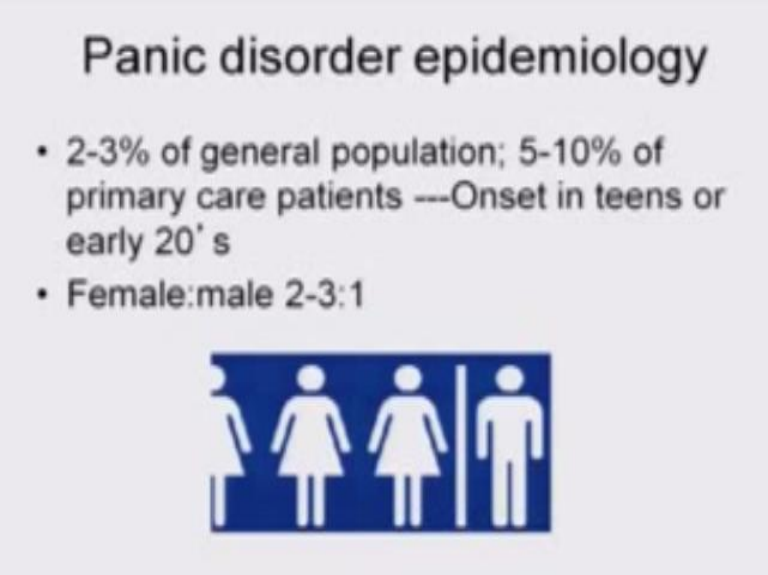

Female issue again as I said.

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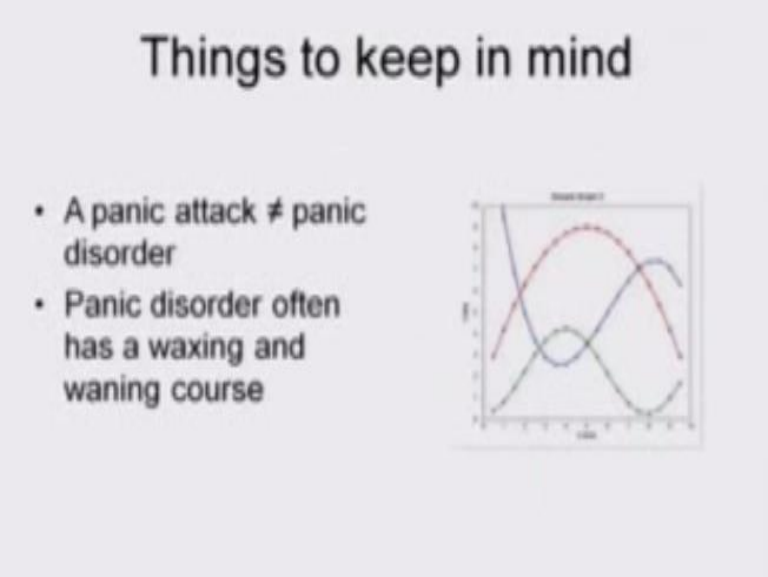

A panic attack is not equal to panic disorder one single attack of panic usually we do not treat if people are having more than four episodes are two episodes in a month then it has to treated a panic disorder is a.

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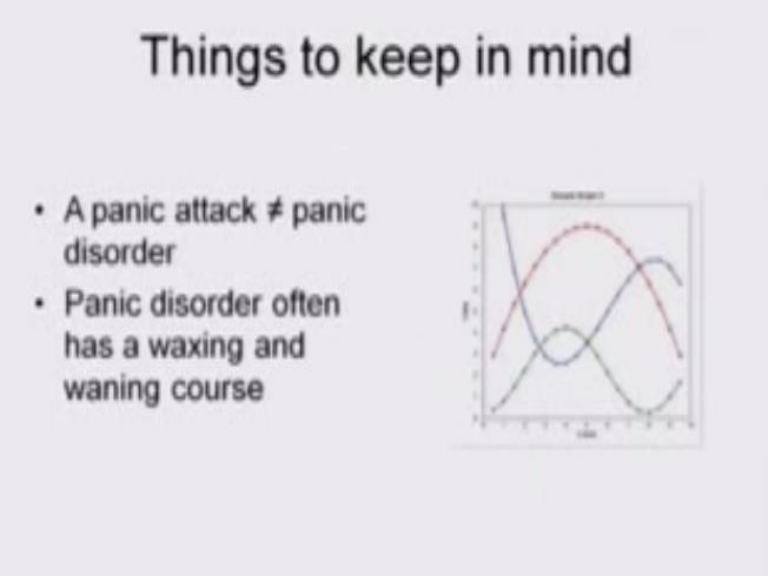

Waxing winning course it can happen nor it can happen after one year or two years or 2, 3 episodes in a month.

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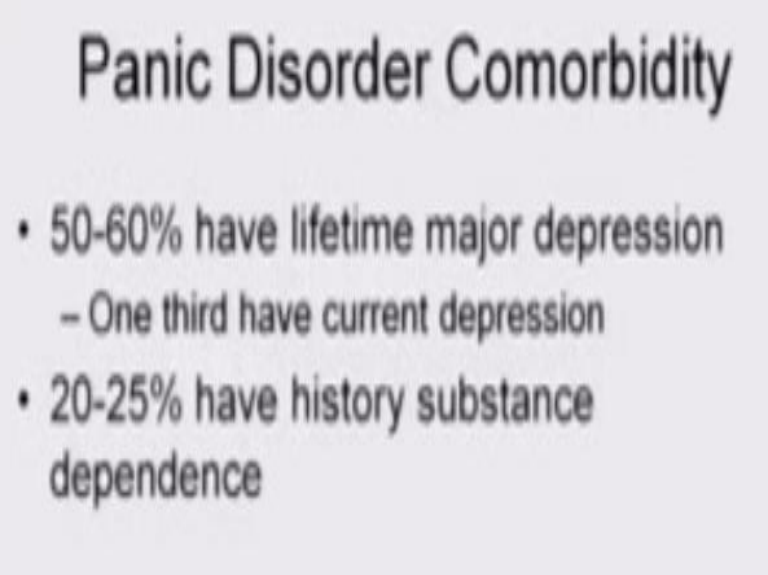

So fifty, sixty percent have lifetime major depression 20 to 25 percent of history of substance abuse.

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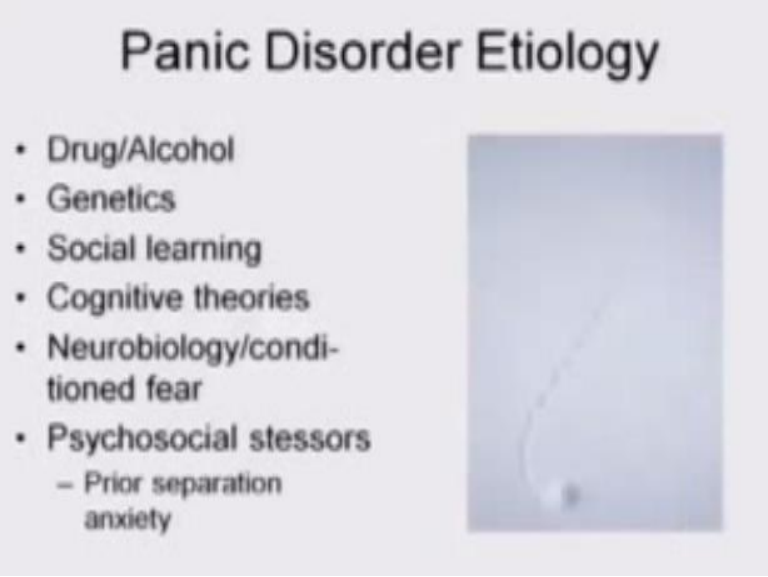

Drug genetics of it is social learning cognitive theories neurobiology separation anxiety can cause.

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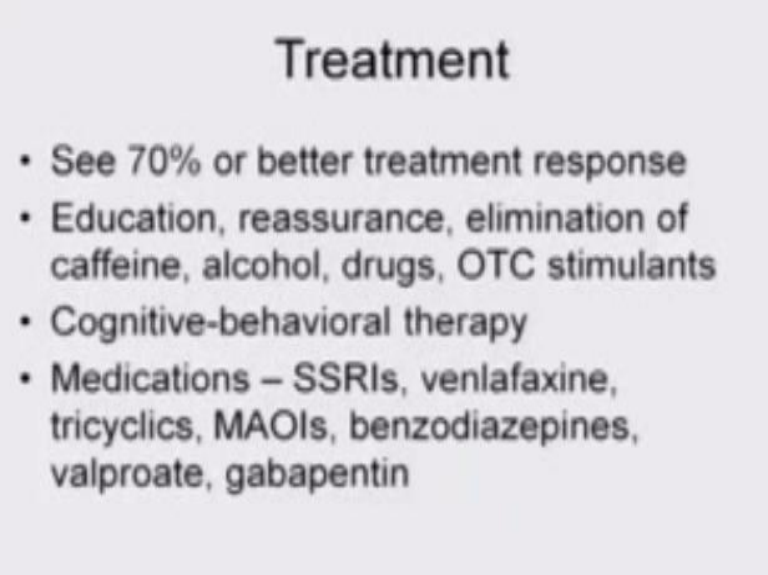

Treatment is very, very effective 70% improve evidence of caffeine alcohol cognitive behavior therapy and the same group of drugs we were talking is really very effective we will talk about in.

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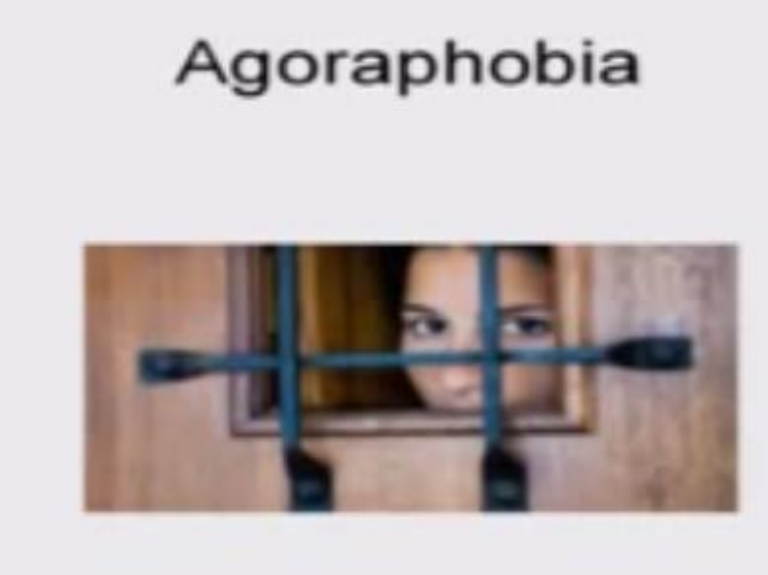

Detail when we talk of another illness and.

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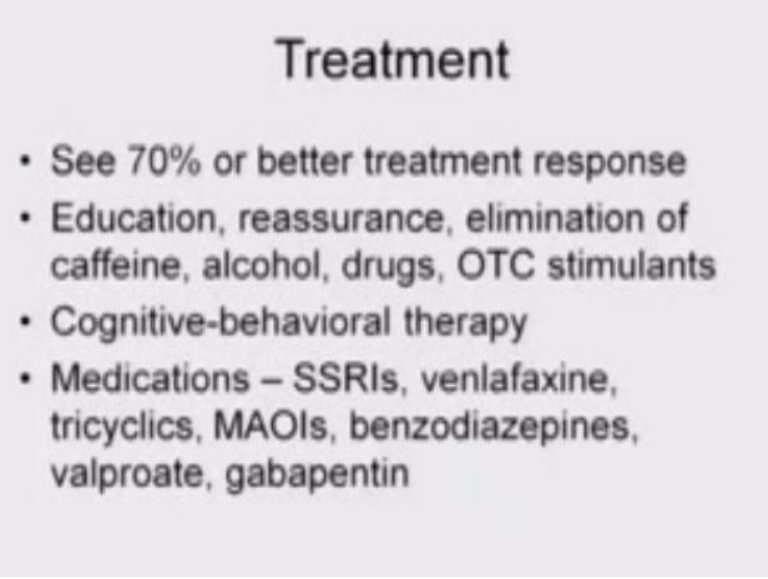

So we continue this in the next picture and we will talk about something more thank you.