Psychology of Stress, Health and Well-Being
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Lecture 6
Stress and Psychological Disorders

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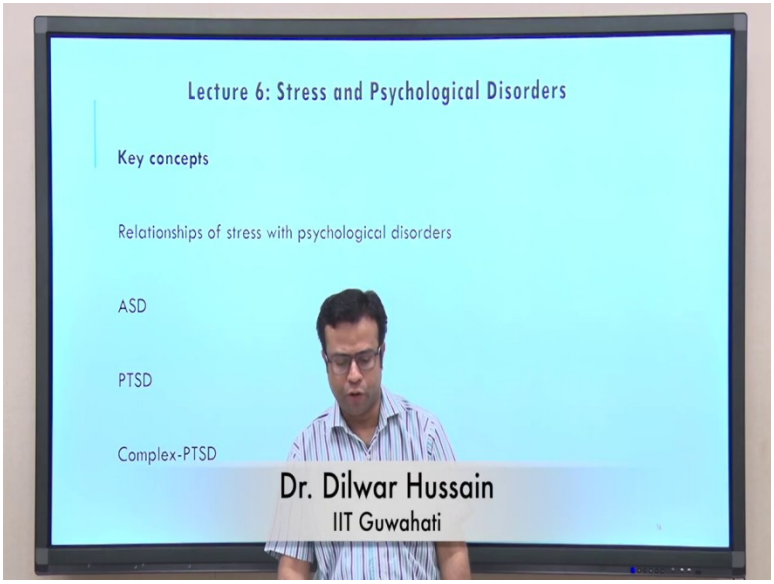

I welcome you to the sixth lecture of this NPTEL MOOC course, titled psychology of stress, health and well-being. So this is the third lecture of module 2. So today we will talk about the stress and psychological disorders. So before we talk about today's lecture let us have a brief recap of the last lecture.

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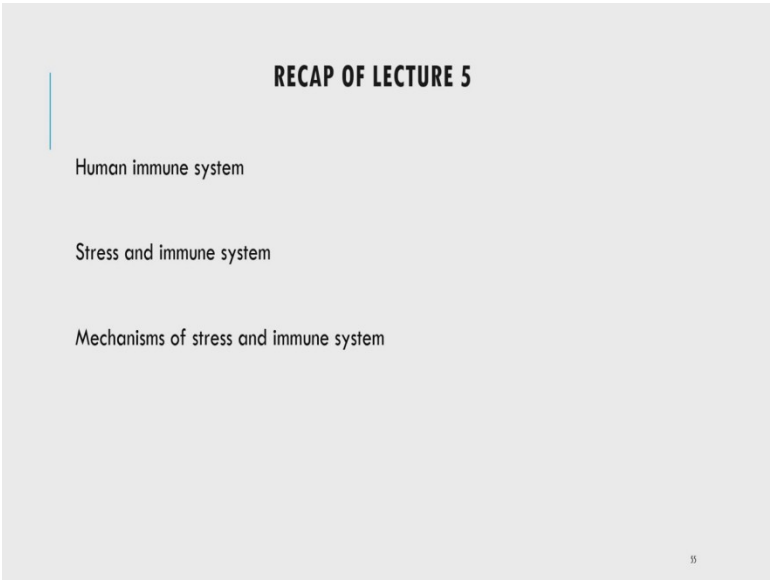

So, in the last two lectures, we talked about how stress is linked to health, and in that sense, we're talking about physical health, and we talked about how stress is linked to non-infectious diseases in lecture 4, and how stress is linked to infectious diseases in the last lecture. So far, we've spoken about how stress can impact infectious diseases by affecting our immune systems. So, in the context of what we've spoken about, there's a field of research called psychoneuroimmunology that studies the relationship between psychological, neurological, and immune factors. And the majority of the connections between mental factors and the immune system are studied in this area. W we've talked about how the immune system is primarily regulated by lymphocytes, which are white blood cells that include primarily B cells and T cells, and how stress can affect our immune system. And, according to some recent meta-analyses, it also depends on the type of stress. As a result, it was discovered that acute stress can temporarily boost our immune system by mobilizing resources or at the very least redistributing immune cells across the body.

Chronic stress, on the other hand, is the leading cause of immune system dysfunction, as it deteriorates or suppresses all immune functions. Then we spoke about the mechanisms that connect stress to the immune system, and we discovered that there are two of them. One is that the release of stress hormones, especially cortisol, which is released in response to chronic stress, suppresses a variety of immune functions or immune cells. Either they aren't produced enough or they are suppressed. The other mechanism we've addressed is behavioral mechanisms, which are linked to some of the behavioral changes that are linked to stress, such as excessive alcohol use, lack of exercise, and sleep problems, all of which can have a negative impact on our immune system.

We've also spoken about the ramifications of this study's findings. Specifically, since stress can weaken our immune system, interventions aimed at mitigating stress, such as relaxation or psychotherapies, can improve our mental and emotional well-being. Both of these should help to boost our immune system. And several studies suggest that this is valid, such as a recent meta-analysis of 56 studies involving intervention studies, which clearly found that psychotherapies like cognitive behavior therapy are correlated with improved immune functions. It continued or persisted for at least 6 months after the intervention. As a result, stress management strategies will help us

improve our immune function as well as our mental and emotional health. So those were some of the main topics that we covered in the previous lecture.

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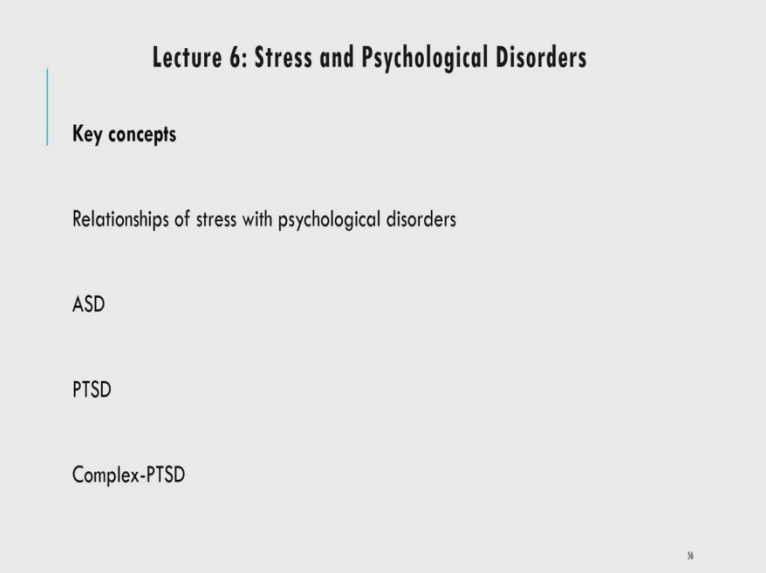

Today, we'll discuss how stress is linked to psychological disorders and how it affects our mental health in particular. So, while stress is not a disease or a medical condition, it can have an effect on our mental health and lead to mental disorders. As a result, we'll go through some main concepts in this lecture, such as the connection between stress and psychological disorders. Acute stress disorders will be discussed in this context. We'll talk about PTSD, or post-traumatic stress disorder, as well as complex PTSD. They're all connected to stressful/traumatic experiences in our lives.

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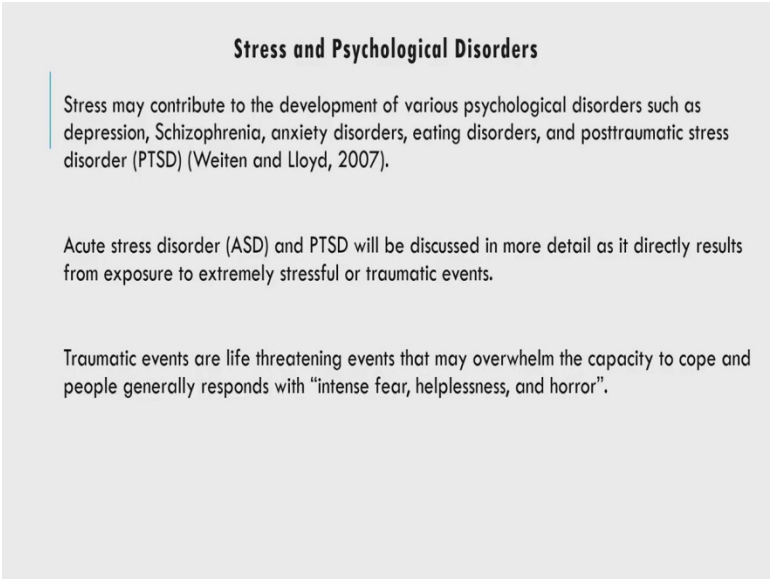

According to different studies, stress can play a role in the development of psychological disorders such as depression, schizophrenia, anxiety disorders, eating disorders, and post-traumatic stress disorder. As a result, it can play a role in a variety of mental illnesses and disorders.

Since stress is not a disease in itself, it may lead to many disorders. We've already seen how stress can have a significant impact on how we think and feel and how these disruptions in thinking and feeling can lead to a variety of psychological problems reflected in our thought processes and emotional issues. We won't be able to discuss all of the psychological disorders that aren't related to traumatic events because that is outside the scope of this lecture. We'll focus on two disorders in particular. Acute stress disorder and PTSD, or post-traumatic stress disorder. In this sense, there is a conceptual distinction to be made between the words stress and traumatic stress. When we speak about stress, it may refer to a very common day-to-day occurrence. If you're caught in a traffic jam, for example, it can be a stressful situation. When we talk about trauma, we're referring to very high-intensity stressful experiences that can be life-threatening and overwhelm your ability to cope. As a result, you feel powerless, fearful, and horrified. Many of these incidents are linked to traumatic stressful events. As a result, if we are confronted with a traumatic event such as the loss of a loved one or an accident; these aren't just stressful situations. These are very traumatic events that can overwhelm our ability to cope. As a result, we can be at a loss about what to do about it. When we are confronted with traumatic events, we

may simply become numb for a short period of time, and most people feel extreme terror, helplessness, and horror. So we must consider the fundamental distinction between stressful experiences and traumatic stress or traumatic events.

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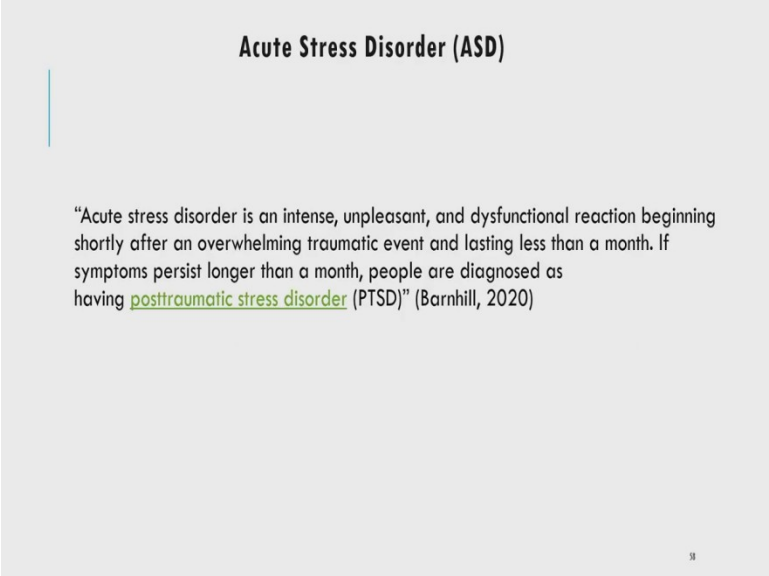

So, let us start with the acute stress disorder. As a result, it's clear that this is linked to stressful encounters and, in particular, traumatic events. As a result, being exposed to a traumatic event will result in acute stress disorder. Acute stress disorder is now described as an extreme, unpleasant, and dysfunctional reaction that occurs immediately after a traumatic event. It usually lasts less than a month.

If symptoms last more than a month, it may be diagnosed as post-traumatic stress disorder, which we will discuss shortly. As a result, if we encounter a stressful incident that is overwhelming and unpleasant, the general reaction or symptoms that we experience as a result of the encounter may be diagnosed as acute stress disorder. If it continues for a comparatively longer period of time it may be diagnosed as PTSD. But it is usually diagnosed as acute stress disorder if there are symptoms that occur within 1 month. If it is more than 1 month, it is usually diagnosed as PTSD.

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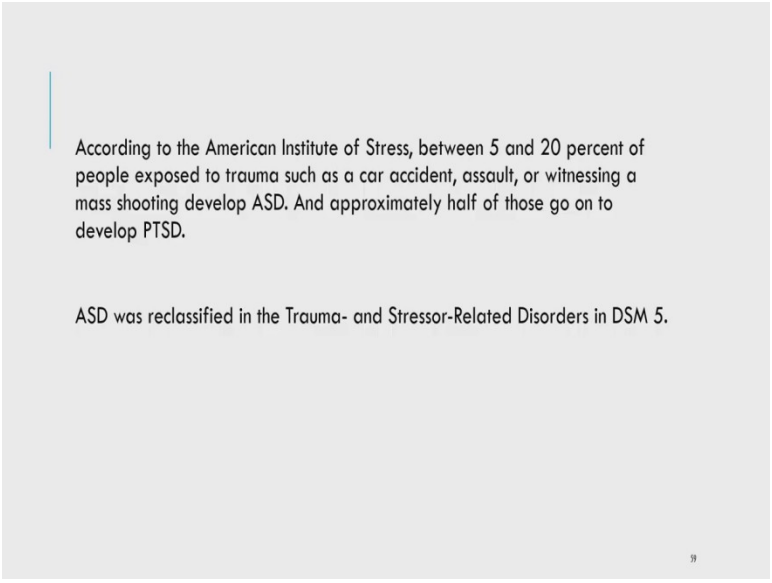

According to the American Institute of Stress, 5 to 20% of people who are subjected to trauma such as car accidents, assaults, or witnessing a mass shooting experience acute stress disorder, with around half of those people developing PTSD. This suggests that their symptoms have lasted more than a month. In diagnostic terms, acute stress disorder has been reclassified as trauma and stress-related disorders in the Diagnostic and Statistical Manual of Mental Disorders (DSM) 5 that is primarily maintained and updated by the American Psychiatric Association. So, DSM 5 is the most recent one, which was released in 2013, and previously, acute stress disorder and post-traumatic stress disorder were classified as anxiety disorders. They are, however, classified separately in DSM 5 under the trauma and stress-related disorders group.

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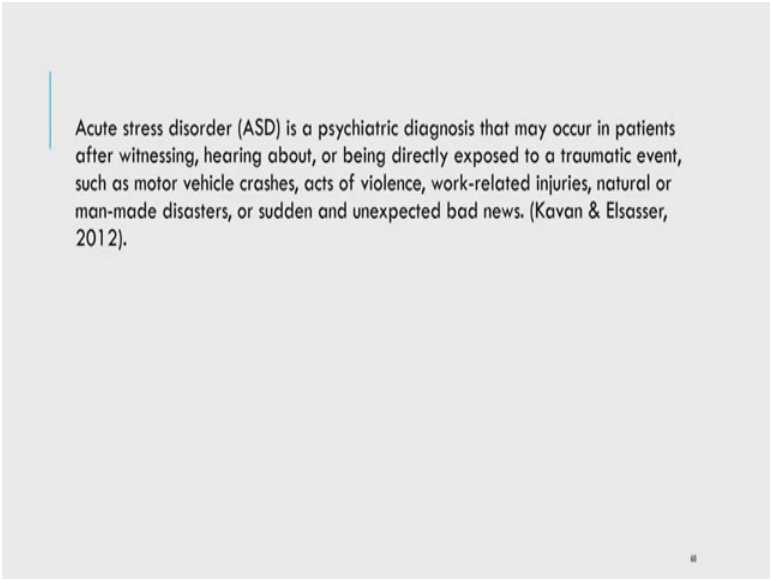

As a result, acute stress disorder is a psychiatric condition that may occur in patients after witnessing, hearing about, or being directly subjected to traumatic events. So it might be things like car accidents, acts of violence, work-related injuries, natural or man-made disasters, and unexpected bad news and so on.

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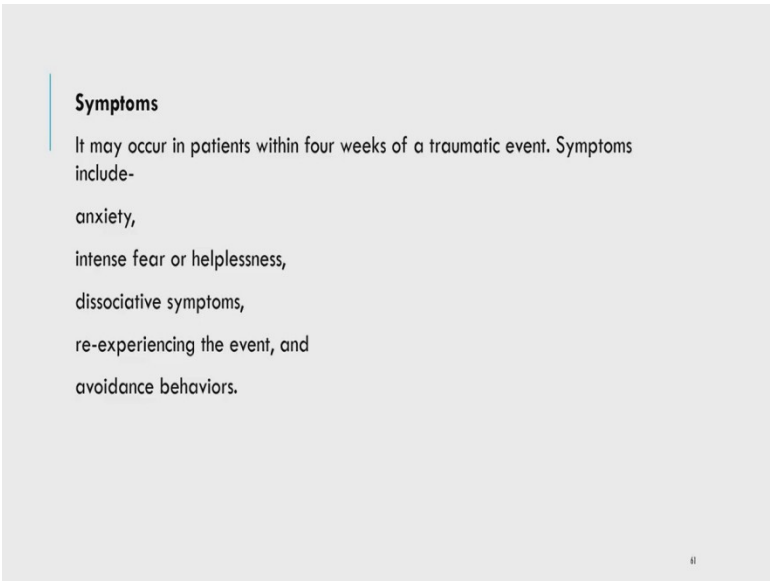

Anxiety symptoms, intense fear or helplessness, re-experiencing of the event, avoidance of trauma-related stimuli, and dissociative symptoms are all common symptoms of acute stress disorder. So we'll go through all of these signs in more depth in PTSD, which we'll talk about right after this. However, under acute stress disorder, one symptom type known as dissociative symptoms is more prominent.

Dissociative symptoms are characterized by a sense of disconnection or discontinuity between your emotions, memories, surrounding environments, actions, and identity. So it's possible that you feel fragmented rather than whole. You can experience a sense of disconnection. There could be a decrease in environmental consciousness. Many aspects of the traumatic experiences can be forgotten, which is a natural process by which our mind seeks to forget some significant aspects of the traumatic event s So that you don't have to think about it. As a result, it's possible that it's a unconscious mechanism. So, all of these symptoms exist, and we'll try to learn more about them in PTSD because they're also very common in PTSD. So, if we have a traumatic encounter, these are some of the most common symptoms that we experience. So, that you do not have to remember it. So it could be an unconscious mechanism. So all these symptoms are there and we will try to understand more detail about these symptoms in PTSD because these symptoms are also very common in PTSD also. So whenever we experience a stressful encounter, these are very common symptoms that particularly traumatic events. These symptoms are very common, and people may develop acute stress disorder if they persist for a month or 28 days, and if it is resolved, then it is kind of ends with acute stress disorder. However, if it is not resolved, one may be diagnosed with post-traumatic stress disorder.

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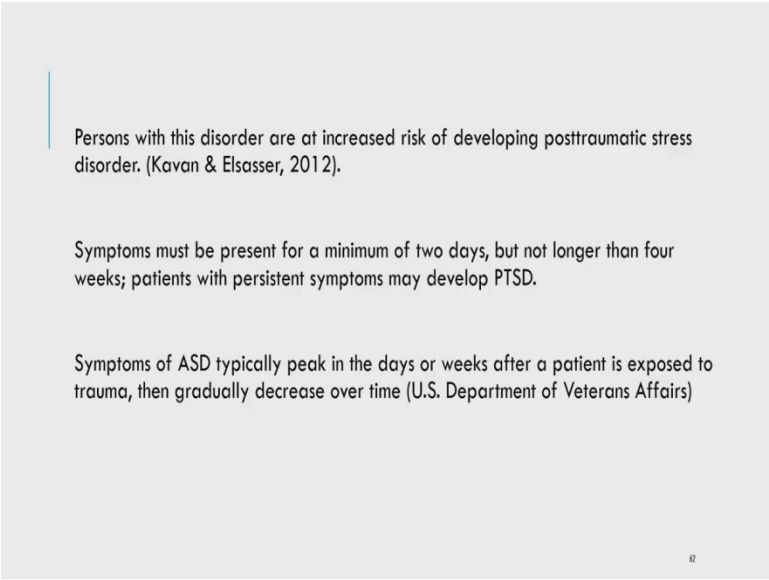

As a result, people with ASD are more likely to develop PTSD because the majority of people with ASD, if not all, develop PTSD. Symptoms can last for a minimum of two days but no more than four weeks or 28 days. PTSD can develop in patients who have chronic symptoms. Acute stress disorder symptoms usually peak in the days or weeks following a traumatic event, which is normal.

When we experience trauma, even though it is just the experience or encounter of the traumatic event, our symptoms usually peak in terms of anxiety symptoms, re-experiencing symptoms, and dissociative symptoms, and then they gradually decrease over time, and if they are resolved within one month, one is finished with ASD.

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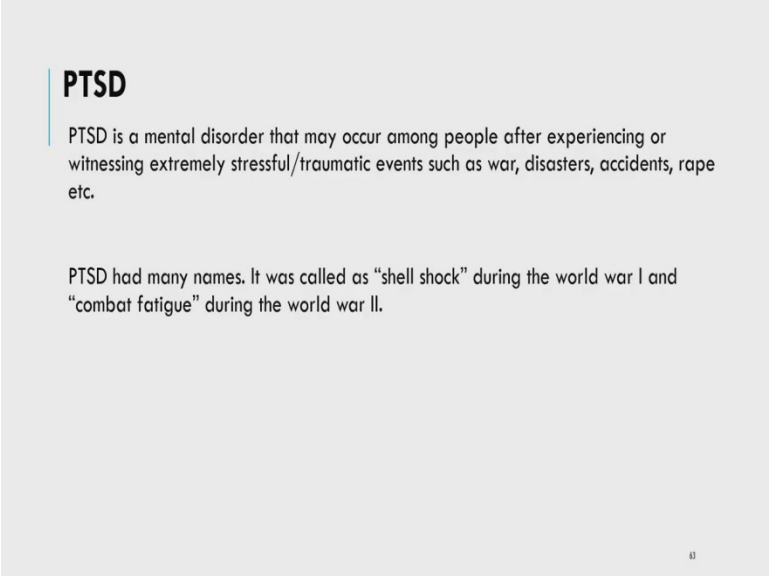

Now we'll discuss post-traumatic stress disorder (PTSD). Many of you have already heard of PTSD since it is widely discussed in the news and other forms of mass media. I it's known as post-traumatic stress disorder (PTSD). So, if one develops a disorder as a result of a traumatic event, it is more likely to be a long-term persistent disorder.

ASD is a more immediate reaction. PTSD is a reaction that lasts a long time. So, post-traumatic stress disorder (PTSD) is a type of mental disorder that can develop in people who have experienced or witnessed highly stressful or traumatic incidents such as war, disasters, injuries, abuse, and so on. PTSD has a long history, and it has been known by several different names before being dubbed PTSD, or post-traumatic stress

disorder. The whole disease or definition of PTSD arose from the history of war or battle.

Almost all major conflicts or world wars have been linked to the discussion or definition of post-traumatic stress disorder (PTSD) and it arose from all of the war veterans. So, let me give you a brief historical overview of how PTSD developed. M any soldiers in World War I displayed PTSD symptoms when they returned home after the war or during the war. It was recognized as shell shock symptoms at the time. Initially, these signs were thought to be a response to prolonged exposure to artillery shocks. As a result of the terrifying experience of artillery shells, it was assumed that they were having mental disorders. Many people referred to it as "war neurosis." There was little awareness of this at the time, and many people did not consider it a disease or a concern. Instead, many people saw it as a sign of weakness, implying that many soldiers were not psychologically strong enough. As a result, they are shocked by war situations, and it was once thought to be a sign of mental weakness. So there was a lack of awareness at the time, and it was seen as a reaction to artillery shocks, explosions, and other such events. Shell shock was renamed or replaced by combat stress reaction during World War II. It was also referred to as battle fatigue. So, not much progress was made during World War II as well. And at the time, the majority of therapy consisted of giving them rest. So, soldiers who were showing symptoms of mental disturbances were given rest so that they can heal and return to the war; and they were provided with a psychosocial support system, which included assistance from their soldier units and other sources. So, most of these activities took place during World War 2. The Diagnostic and Statistical Manual of Mental Disorders (DSM) was first published by the American Psychiatric Association in 1952. As a result, the first mental disorder manual was introduced. The first edition of the DSM, published in 1952, did not contain a specific PTSD category, but did include a concept known as gross stress reaction, which was proposed for people who are relatively normal but exhibit some symptoms when they are exposed to a traumatic event. However, it was assumed that people would recover in a matter of days. As a result, it was not commonly regarded as a disease. However, in DSM 2, which was published in 1968, this diagnosis was dropped in favour of something called adjustment reaction to adult life, which was not quite the same as PTSD. It didn't help much in terms of comprehending war veterans' reactions.

The American Psychiatric Association officially adopted PTSD or post-traumatic stress disorder in their DSM 3 or third revision of the DSM in 1980, and it was introduced as a result of a number of protests, including war veteran movements. Many veterans, especially those who served in the Vietnam War, developed PTSD symptoms. As a result, there was some pressure and movement on the veteran side. Many feminist movements arose, especially in response to the many sexual assault survivors who displayed similar symptoms. It also included a Holocaust survivor advocacy group as these symptom was also displayed by many holocaust survivors, the research revealed that not only war veterans but also many other civilians exhibit similar symptoms following traumatic events. As a result of all of these movements, it was eventually included in the DSM 3 in 1980, and this diagnosis developed after that. And there were several revisions. The PTSD diagnosis criteria were revised then in DSM 4, and eventually in DSM 5, where several changes were made in terms of understanding the diagnosis criteria. So, based on the evolving research few things were changed in every revision.

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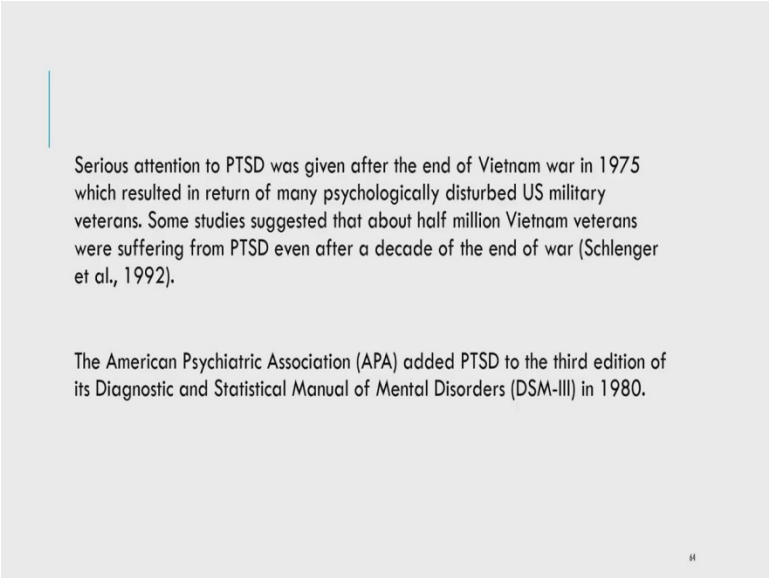

So, after the end of the Vietnam War in 1975, serious attention was paid to PTSD, which resulted in the return of many psychologically disturbed US military veterans. According to some estimates, about half a million Vietnam veterans are now suffering from PTSD even decades after the war ended.

As a result, it was a truly horrible situation for veterans. As a result, this became a significant cause for it to become a formal diagnosis in the DSM. The American Psychiatric Association, of course, included it in the DSM 3 in 1980.

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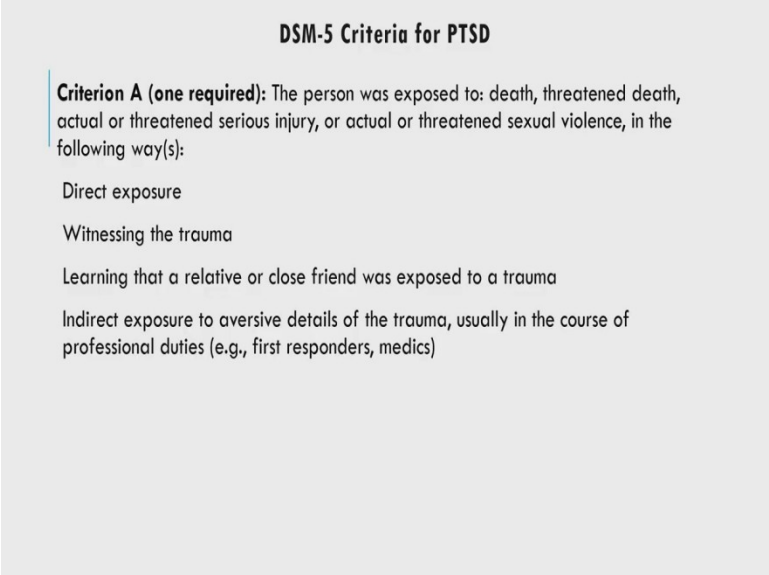

So, what are the criteria? We'll look at the most recent DSM 5 criteria. How a person is diagnosed with PTSD. So there are many criteria. So we will just discuss some of the broad criteria that are introduced in DSM 5.

So, in DSM 5, there's a special category for trauma and stress-related disorders. They were previously classified as anxiety disorders in DSM 4. So the first PTSD criterion is called criteria A, which states that a person must have been subjected to death, threatened death, actual or threatened serious injury, or actual or threatened sexual assault in at least one of the following forms to be diagnosed with PTSD. So, there must be direct exposure. An individual may be directly exposed to a traumatic event by seeing it happen in front of him or her, or by knowing that a parent or close friend was exposed to a trauma. Even hearing about a traumatic event from another person can lead to PTSD or indirect exposure to aversive details of the trauma. Indirect exposure occurs when first-line staff or medics are unintentionally subjected to certain aversive details of a traumatic incident, such as working with accident victims or trauma victims, in the course of their professional duties. To be diagnosed with PTSD, you must have experienced at least one of these types of exposure. So, this is criterion A.

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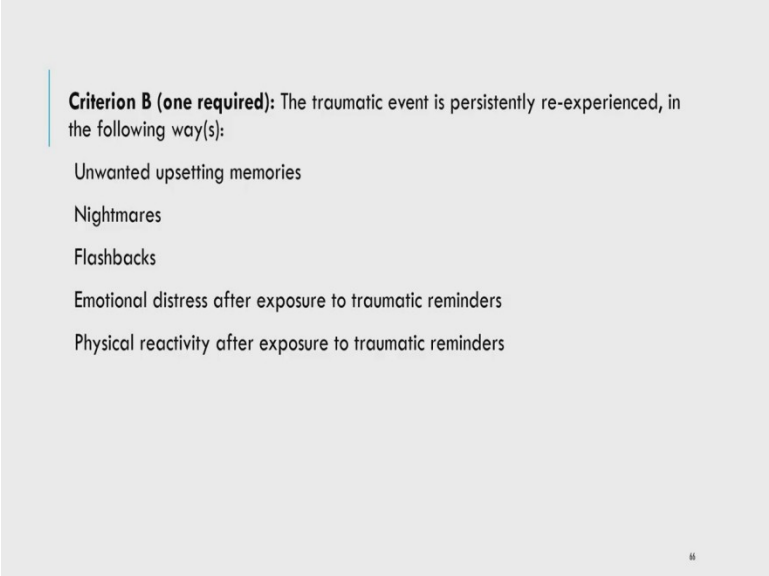

Criterion B suggests the traumatic incident has been persistently re-experienced. One of the main symptoms is the re-experience of the symptom. So one is persistently re-experiencing the traumatic incident that has happened. So, let's say, after an accident, it's not going out of your mind.

So, you are continually recalling this traumatic experience again and again in terms of, or in the form of, unwanted disturbing memories. So memories come back again and again, or you may have nightmares about these traumatic events.

You may have flashbacks about these traumatic events, emotional distress after exposure to traumatic reminders, physical reactivity after exposure to traumatic reminders. So all of these re-experiencing symptoms or at least one of the way people with PTSD experience. These symptoms can be automatic and unconscious.

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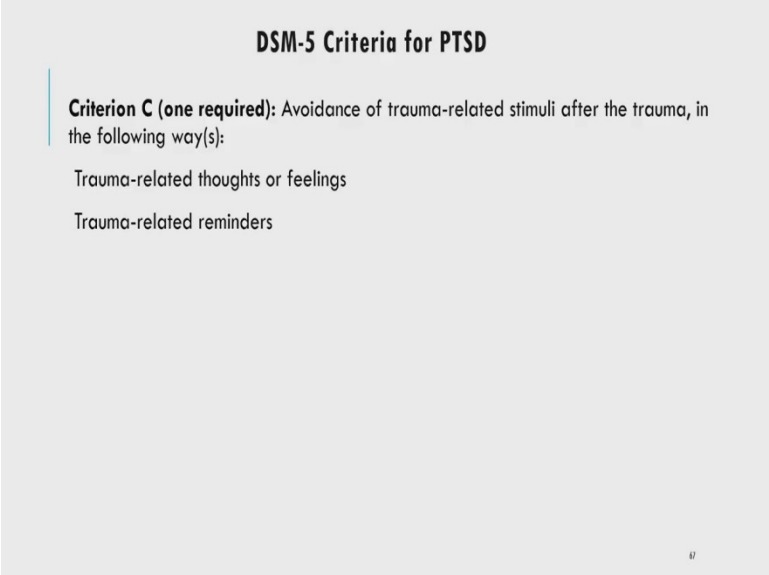

Criterion C says avoiding trauma-related stimuli after trauma in the following ways. At least one of them is needed. one may try to avoid trauma-related thoughts or emotions. Now, one important thing to consider is that, on the one hand, the individual is trying to avoid any reminder that comes to mind or any stimulus from the environment associated with the traumatic incident consciously or unconsciously. A and, on the other hand, there is continuous re-experiencing of the trauma related stimuli. So, this is a kind of vicious cycle. The more you try to avoid something, particularly on a mental level, the more it comes to your mind. So that's sort of a paradoxical thing.

So, this is called thought repression in psychology, and a lot of research suggests that the more you attempt to suppress your thought, the more it eventually comes to your mind. For example, in most thought suppression studies, participants are usually asked to suppress their thoughts. For example, the participants may be asked, you can remember anything, or you can think about anything but don't think about a pink elephant for the next 1 minute. So let's assume that the suggestion is given to you. So for the next 1 minute you can think of anything but don't think of pink elephants, and it was found very interestingly that all the participants ended up thinking only about pink elephants, which they were simply asked to stop. So, why this is happening mostly because if you want to stop something, you need to remember it first. So it comes to your mind immediately. Well, that's the thing. But there is a similar kind of thing going on with the people of the PTSD. They try to avoid thoughts and memories

of trauma-related events, but actually is vary avoidance causes re-experiencing of the trauma related stimuli again and again.

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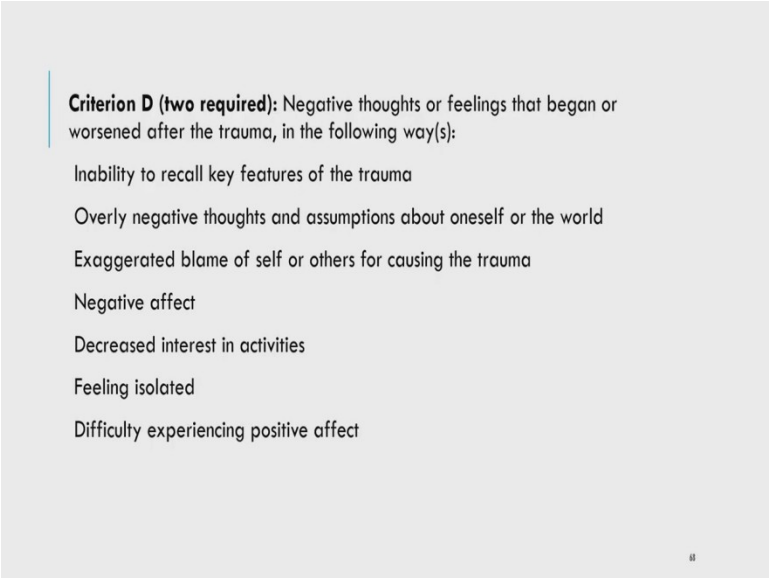

Criterion D includes negative thoughts or emotions that began or worsened after the trauma. So this has been introduced in DSM 5. These parameters were not there earlier. So this is a new introduction to the DSM 5. Negative thoughts or cognitions or emotions that actually begin after a traumatic event or are aggravated by a traumatic event. It may include inability to recall key features of the trauma, overly negative thoughts and assumptions about oneself or the world, too many negative thoughts about one's own self and about the world in general that can be exaggerated, self-blame or others for causing the trauma, heightened negative emotions, reduced interest in activities, feeling alone, difficulty experiencing positive emotions. Therefore, at least 2 of these symptoms are needed for the diagnosis of PTSD.

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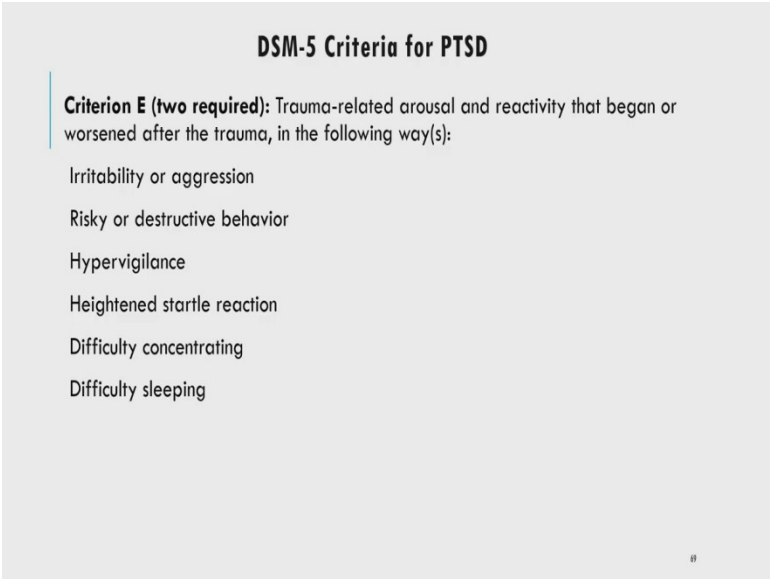

Criterion E says trauma-related arousal or reactivity that began or worsened after the trauma. So, in hyperarousal, physiological reactivity increases. People become highly aroused in terms of physiological reactivity. So one may become highly irritated or aggressive. One may tend to do more risky and destructive behavior. There is hypervigilance. Small things can disturb you. A small sound from the environment can disturb you. There can be heightened startle reactions, difficulty in concentration because of physiological reactivity. Whenever you are highly physiologically aroused, it is very difficult to pay attention or focus, leading to difficulty in sleeping. So, this hyperarousal can happen as one of the core symptoms. At least 2 of these symptoms are commonly found among PTSD or the people experiencing PTSD.

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Criterion F says the symptoms last more than 1 month. So, since that's the difference between acute stress disorder and PTSD. If the symptoms lasts less than 1 month, it may be considered acute stress disorder. But if it lasts more than 1 month, it may be diagnosed as post-traumatic stress disorder.

Criterion G is also needed, which states that symptoms create distress or functional impairment. So this is really necessary, too. Whenever we say anything like disorder, the implication is that it may have a negative impact on our functioning in terms of day-to-day work, social functioning etc.

Criterion H is also required, which states that symptoms are not due to any other causes related to such things as medication, drug use or other illnesses. Any of the signs may be linked with some drug, alcohol use, or other disorder. If it is not associated with a traumatic event, we cannot call it PTSD.

These are, therefore, relevant guidelines suggested by DSM 5 on the basis of all recent research results to diagnose anyone with PTSD. So usually, as you see, there are four clusters of PTSD symptoms that are very important in making the diagnosis of PTSD.

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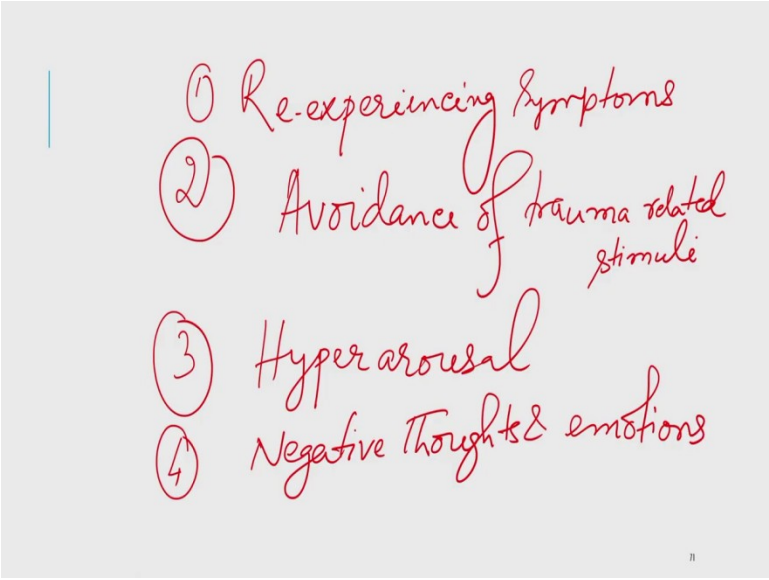

So the symptoms are re-experiencing of the traumatic events, avoidance of trauma related stimuli, hyper-arousal in terms of physiological arousal and fourth one which was introduced in DSM 5 is negative thoughts and emotions. So these are the 4

clusters of symptoms and within each cluster there are specific categories that we have discussed. So these are very important criteria of PTSD and many people may experience these symptoms after traumatic event and it is very common. But one may not have the disorder.

For disorder, we need all these specific criteria, and it has to be persistent and functional impairment, and so on. But these are common symptoms most of us will experience after a traumatic event which may not become a disorder in many cases. So this is, in a nutshell, the symptoms of PTSD.

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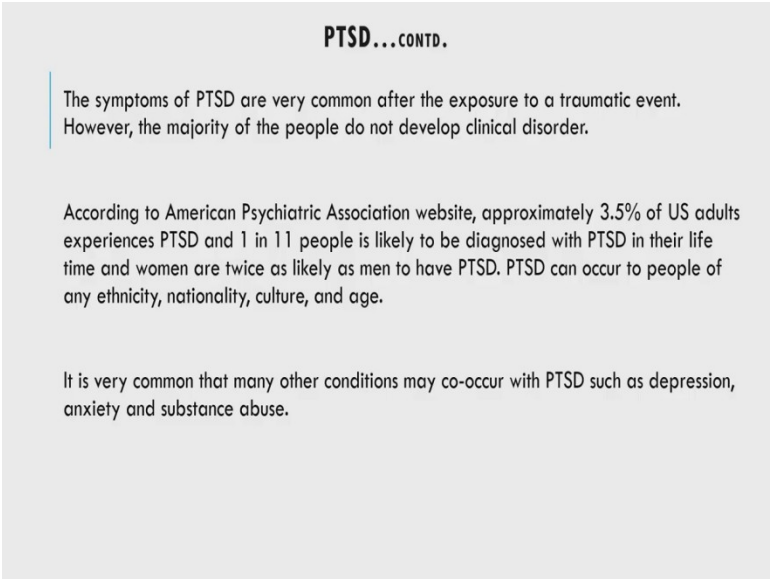

So, the symptoms of PTSD are very common, as I have said. After exposure to a traumatic event, most of us will experience these symptoms. However, the majority of people do not develop the clinical disorder. For clinical disorder, we need a very specific diagnosis of each of these categories.

According to the American Psychiatric Association website, approximately 3.5 percent of US adults experiences PTSD, and 1 in 11 people is likely to be diagnosed with PTSD in their lifetime, and women are twice as likely men to have PTSD. So, this percentage seems to be double in the case of women. PTSD can occur to people of any ethnicity, nationality, culture, and age. So it is a kind of universal thing. It can be experienced by people of any culture, any nation, any age group.

So it is very common that many other conditions may co-occur with PTSD. So it is very commonly reported, or research has indicated that many other co-morbid disorders may happen or symptoms may happen with PTSD such as depression, anxiety, substance abuse. So these are very commonly co-occurring symptoms. They are co-morbid symptoms.

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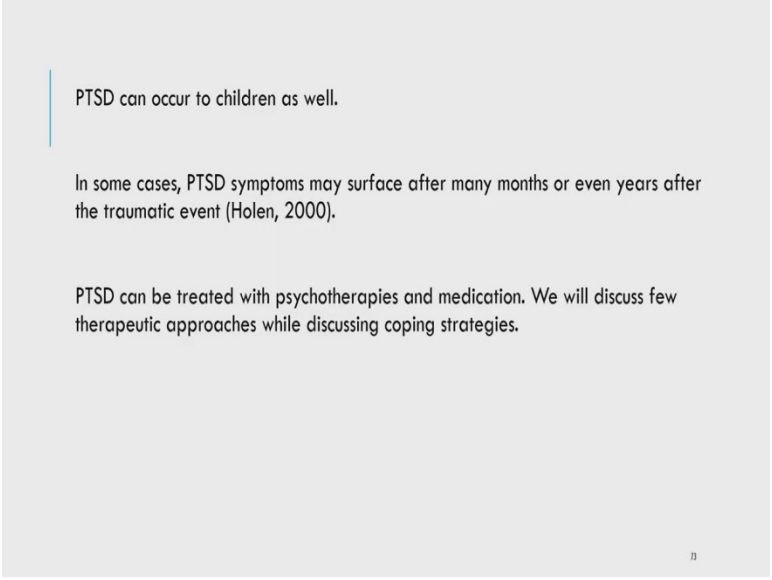

Now, PTSD can occur in children as well. So we will look into a little bit of detail about the children aspect. So it is not just that adults-only experience PTSD. In some cases, PTSD symptoms may surface after many months or even years after the traumatic event. So in some exceptional cases, it is possible that people are not immediately showing symptoms of PTSD because people may become numb for some time. But they may express their symptoms even after months and years.

So, it is possible that symptoms may be repressed initially, but they will be expressed later on. So PTSD can be treated with psychotherapies and medication, and obviously, it depends on the case-to-case basis. We will discuss many strategies common to psychotherapies and in terms of coping with the stress, sections of the chapters that we will be discussing in the upcoming lectures. So some of these things we will also cover.

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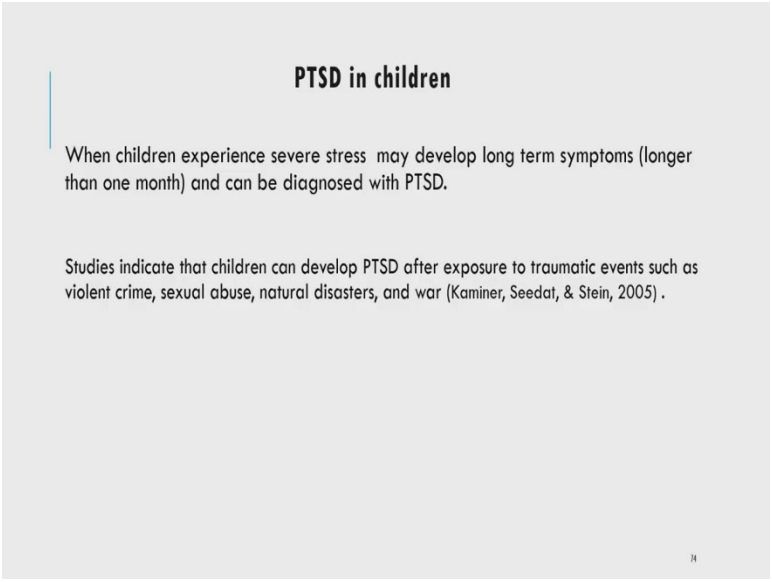

So, we will talk a little bit about PTSD in children. Now traumatic events may be encountered by anybody, including children. So when children experience severe stress or trauma, they may develop long term symptoms which may persist for more than a month. So many times, they can also be diagnosed with PTSD. Studies indicate that children can develop PTSD after exposure to traumatic events such as violent crime, sexual abuse, natural disasters, and war. When children are exposed to such kinds of events or experience such events, many children can develop PTSD.

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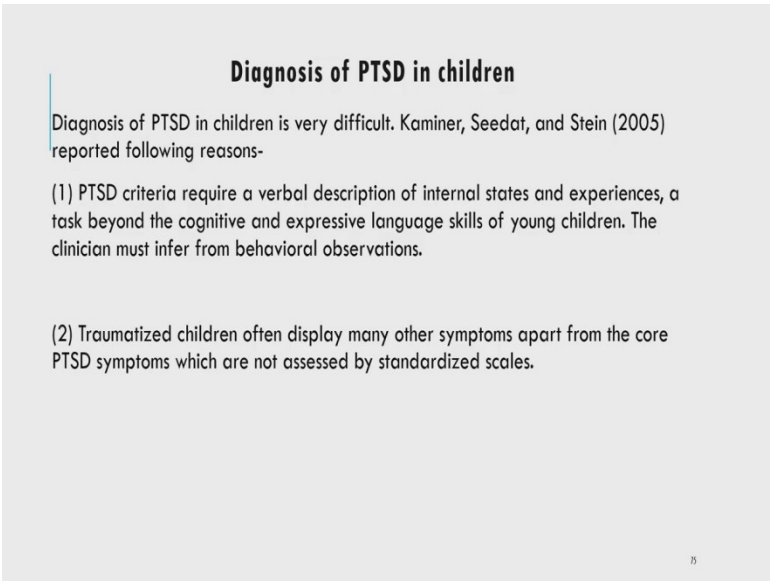

Now, the diagnosis of PTSD in children is very complicated and very difficult for many reasons. So some of these reasons we will discuss. For example, the Kaminer and his colleagues 2005 in one of the research articles reported why it is so complicated to diagnose PTSD among children. One explanation for this is that most of the PTSD criteria we've addressed can be conceptualized and articulated by adults. I'm having these symptoms. Hyperarousal is a condition that I suffer from. As a result, I am disturbed. I'm having trouble concentrating; all of these signs can be explained or reported verbally by an adult regarding their internal states and experiences. However, most of these experiences are beyond a child's cognitive and linguistic abilities in terms of explaining these inner states. As a result, this becomes extremely complicated. Since they are unable to report it, we must conclude from their behavioral observations or even ask adults, which is a more indirect method of determining symptoms. As a result, it is more difficult.

Another reason is that traumatized children often display many other symptoms apart from the typical symptoms that are measured in standardized scales and instruments. So for the assessment of PTSD, many standardized scales and interview schedules typically look into the symptoms that I have discussed. But when it comes to the children, they may show many other additional symptoms which are not captured by these measurement instruments.

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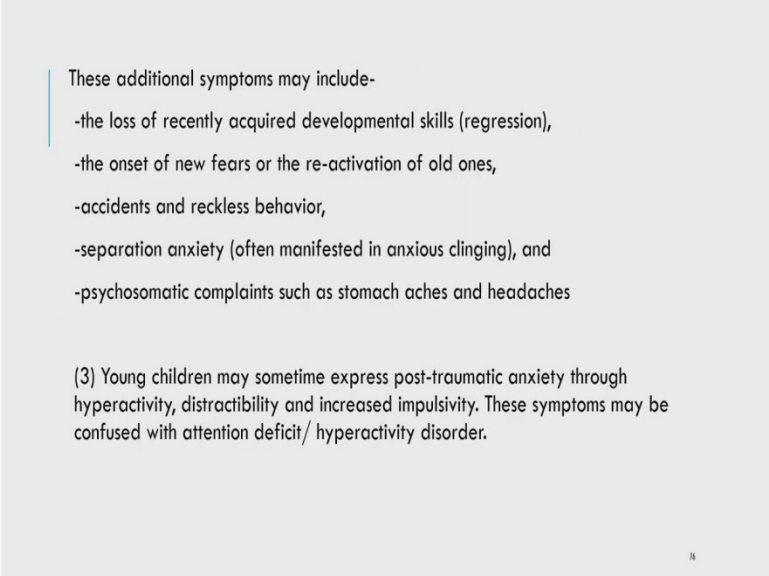

Many additional symptoms, for example, may include the loss of newly developed developmental skills. As a result, some children can exhibit symptoms as a result of a traumatic event. They can regress in terms of new skills they have recently acquired. They could unexpectedly cease to demonstrate those abilities. For instance, certain advancements in linguistic and verbal abilities, as well as language development that took place might revert, or lose those abilities. They may stop socializing after the traumatic event. So, in the case of children, such regression can occur. There's also the risk of developing new fears or reactivating old ones.

As a result, children can exhibit new fears as well. For example, they may stop playing outside. Following traumatic events, children can also exhibit accidents and reckless behavior.

Children also show a lot of separation anxiety. So they will cling to their parents and will not likely to go away from their parents, and those clinging behaviors may be very visible in children. Children also show many psychosomatic complaints such as stomach aches and headaches. So all these symptoms are not typically captured by those standardized instruments which are primarily meant for adults. So this makes it more difficult to diagnose PTSD in children.

And third reason is many young children may sometimes express post-traumatic anxiety through hyperactivity, distractibility, and increased impulsivity. So they become highly impulsive, hyperactive. Those symptoms may often be confused with

attention deficit or hyperactivity disorder, which is another separate category that may not have a connection with traumatic events. So it is possible sometimes one may get confused because of some apparent similarity of symptoms with the hyperactivity disorder or attention deficit disorder.

So, it is a more difficult and complex process to diagnose and understand PTSD among children because of all these reasons. But research shows that it is very common among children to develop PTSD after a traumatic event.

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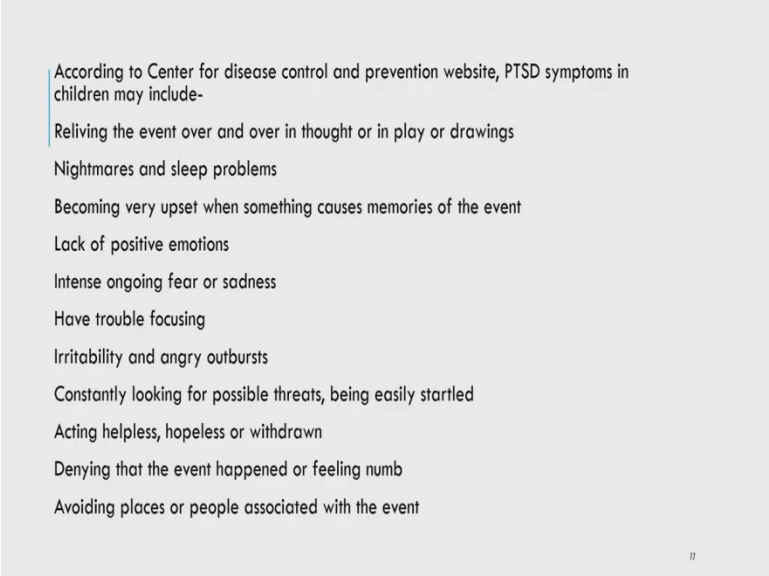

So, according to the center for disease control and prevention, CDC website, there are many other general symptoms that children can display, such as reliving the event over and over in thought or in play or while they draw something. They may relieve those traumatic events. They express it in terms of their drawings, playing. Nightmares and sleep problems are also visible among children. They also become very upset when something causes memories of the event. They also show a lack of positive emotions, intense ongoing fear or sadness, trouble focusing or concentrating, irritability and anger outbursts. They may also constantly look for possible threats, being easily startled, which is a hyperarousal symptom. They may also act helpless, hopeless, withdrawn, and inactive. Sometimes they may deny that event has happened or feel numb. They may experience numbness. They may also avoid places or people associated with the event. So all these diverse symptoms are possible. Many of them

are under those typical clusters of PTSD, but children may show beyond those symptoms and many additional symptoms.

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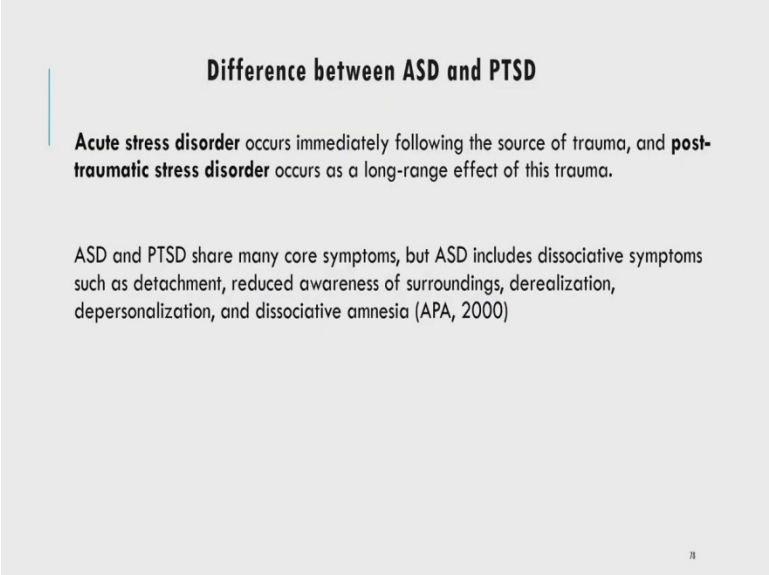

So, technically we have discussed both acute stress disorder and post-traumatic stress disorder. We have already discussed some of the differences. So the difference typically lies in the fact that acute stress disorder occurs immediately after the trauma and post-traumatic stress disorder occurs as a long-term effect of the trauma. So PTSD is a more long-term effect of the trauma.

So, ASD and PTSD shared many core symptoms, but ASD is more prominently includes dissociative symptoms such as detachment, reduced awareness of the surroundings, derealization, depersonalization and dissociative amnesia. So these are mostly symptoms of discontinuity or kind of scattered experience within oneself. So one may feel dissociated from one's thought memories and the environments. So this may be experienced in terms of these symptoms. So this is more common in ASD.

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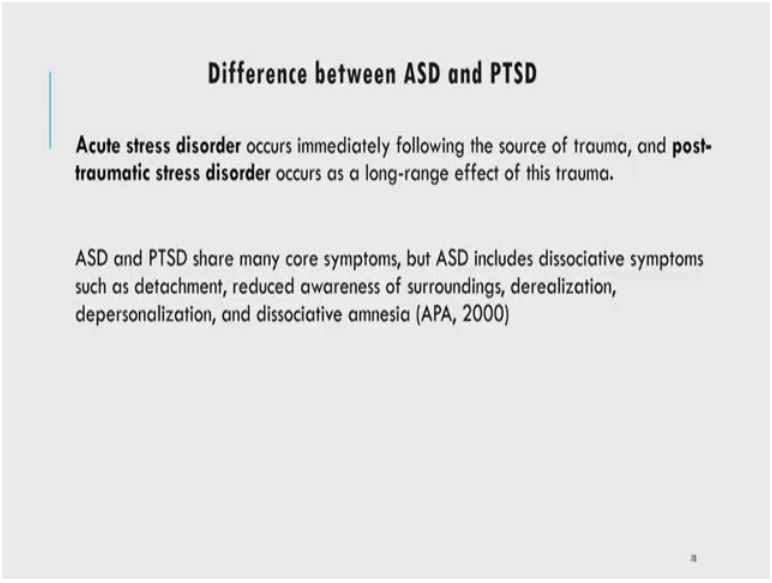

So, in a tabular form, it is shown here. So basically, ASD occurs immediately after the trauma. PTSD occurs as long-term effects of trauma, especially beyond one month. So the onset of ASD occurs between 0 to 28 days after the trauma. So it generally occurs within 28 days and gets resolved. The onset of PTSD occurs at least after 1 month of the trauma. So symptoms of ASD last between 3 days to 4 weeks, whereas PTSD symptoms last at least for 1 month and can persist even for several years. ASD share almost all the core symptoms of PTSD, but ASD includes more pronounced dissociative symptoms. PTSD includes primarily re-experiencing, avoidance, hyperarousal, and negative cognitions symptoms. ASD also includes most of these symptoms, but dissociation is more pronounced in ASD. Many people having ASD may develop PTSD if it persists.

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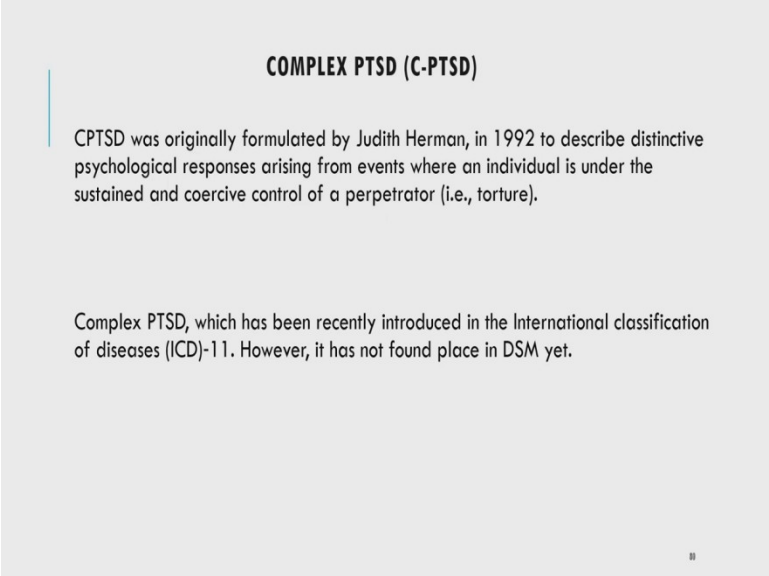

Along with all of this PTSD literature, there was another type of PTSD called Complex-PTSD, which is a type of PTSD. It's been referred to as a "parallel category" by the researchers. One Harvard psychologist, Judith Herman was the first to coin the term "complex PTSD" In 1992. She used the term to identify distinct psychological reactions when individuals are subjected to the perpetrator's prolonged and coercive power and torture victims, particularly those subjected to frequent and prolonged traumas and torture by a perpetrator. And Judith Herman discovered that the standard PTSD diagnosis criteria are insufficient to explain such repeated and long-term traumatic experiences. So she coined the term "complex PTSD," and this diagnosis was not included in the standard DSM or diagnostic manuals for psychiatric disorders. So, As a result, it is still not included in the DSM 5. However, there is a separate diagnosis manual known as the International Classification of Diseases, or ICD in its eleventh version, which was recently added, included complex PTSD in their manual. WHO, or the World Health Organization, is in charge of ICD.

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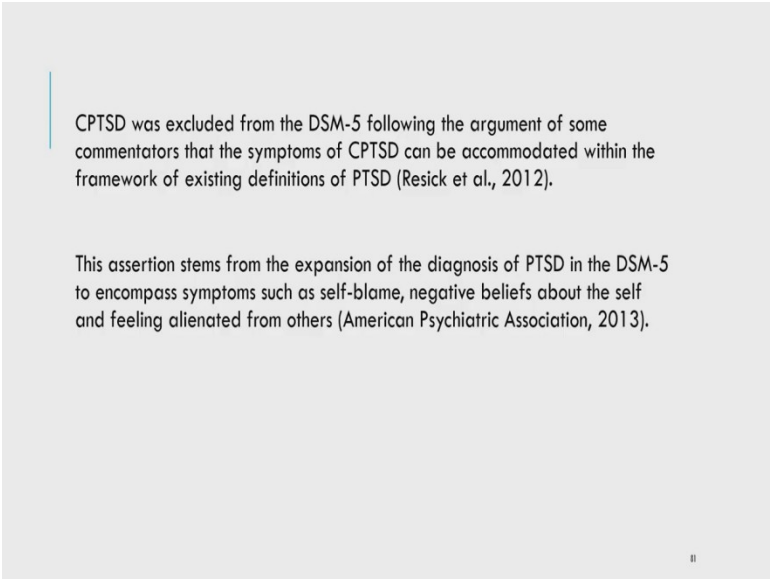

Thus, complex PTSD has been omitted from the DSM 5 or has in fact, never been included in the DSM classification. Many researchers argued that the symptoms of complex PTSD can be accommodated within the context of current PTSD definitions.

As a result, some people objected, and there was some controversy, and they were unable to introduce it. They also added to the current PTSD criteria by including a new criterion called negative cognitions, or negative thoughts and feelings, which we discussed earlier.

Clearly, many people believe that categorizing complex PTSD as a distinct group is much more useful in recognizing the complex traumatic experiences that certain people go through.

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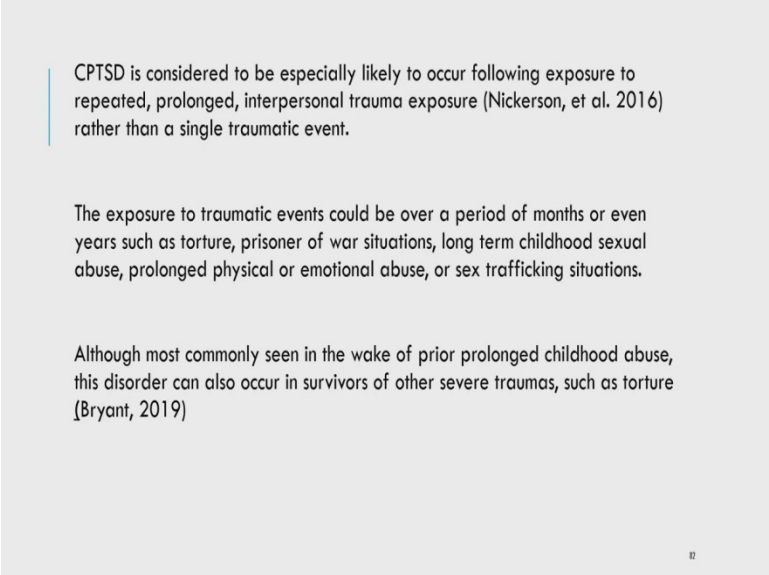

Complex PTSD is also thought to be most likely to occur after frequent, prolonged and interpersonal traumatic events. PTSD may occur after a single traumatic incident, but complex PTSD occurs more in case of frequent and prolonged traumatic events. So there are several stressful experiences, and they're frequent and prolonged. People undergo complex PTSD in these situations.

Exposure to traumatic incidents could be over a period of months or even years, such as torture, prisoner of war situations, long-term childhood sexual exploitation, chronic physical or emotional abuse, human trafficking situations. So when a person experiences prolonged and multiple traumatic incidents, it is no longer just PTSD; it is complex PTSD. While most often seen as a result of prior chronic childhood violence, this condition can also occur in survivors of many other traumatic events, such as torture.

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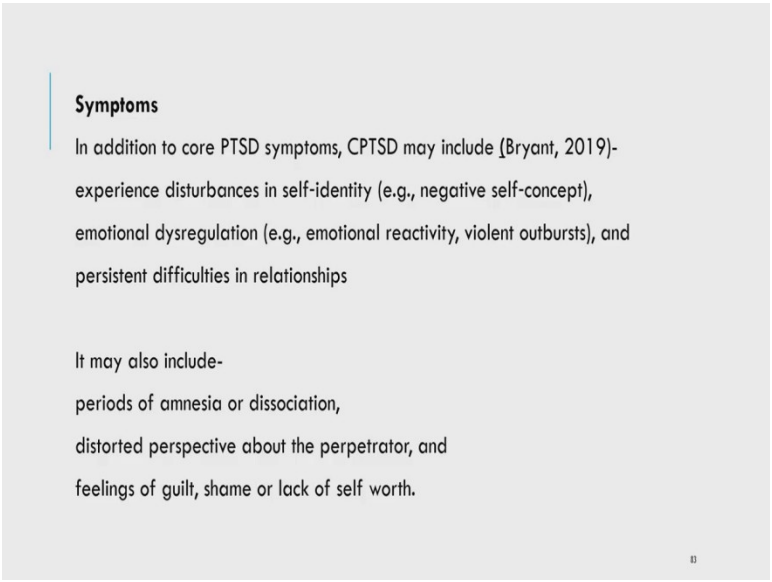

So, symptoms of complex-PTSD include all of the symptoms of PTSD, as well as symptoms beyond PTSD, since the trauma experience is much longer and involves multiple traumatic events. This involves additional symptoms, including self-identity disturbances.

So the sense of self-identity can be disturbed or shattered in the case of complex PTSD. Emotional deregulation is very normal, and when one is going through such experiences, the inability to regulate emotions could be a common experience. People may display a high reactivity of emotion, violent outbursts.

These are very common in complex-PTSD, and there may be difficulties in forming relationships. There is, therefore, persistent difficulty in establishing relationships. Primarily such people may find difficulty in trusting others because of their past history of torture and violence.

Symptoms may also include periods of amnesia or dissociation. So, amnesia is more like you forget some part of the traumatic event. So it is a natural mechanism or coping mechanism of our mind that people remember some aspects of the events, and forget some other as it may be very disturbing and one may not tolerate it. So our mind unconsciously represses those memories, and we forget them. So those kinds of forgetting or amnesia or dissociation is also similar symptom can happen in case of complex-PTSD. It can also be expressed in terms of distorted perspectives about the

perpetrator. So, people are no longer able to perceive rightly who is what and what is right and what is kind of real behavior, and that kind of distortion of perception can happen. Feelings of guilt, shame, lack of self-worth, all these symptoms can also be there with complex PTSD.

So, we have discussed in the last 3-4 lectures how stress is related to human health, and we have discussed both physical health and mental health. In the context of physical health, we have discussed both infectious disease as well as non-infectious diseases. That stress can contribute to all kinds of physical diseases. And we have discussed in detail the mechanisms of how stress can cause all these diseases, and today we have seen how stress can influence our mental health, particularly by promoting certain psychological disorders and particularly ASD and PTSD, and it can really influence the quality of our life and functioning. So, it is very important to understand that stress can have all these diverse, adverse impacts on our health. So with this, I will stop today's lecture. Thank you.