BLOCK -III MENTAL DISORDERS - I

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UNIT 8: ANXIETY DISORDERS *

Structure

8.1 LEARNING OBJECTIVES

After studying this Unit, you would be able to:

- *Explain the clinical picture, causal factors, and treatment of Phobia, Social anxiety disorder, Panic disorder, and Generalized anxiety disorder.*

8.2 INTRODUCTION

We often become anxious in our day to day life situations, such as, when we have to appear for an exam/job interview, or caught in a traffic jam while already running late, trying to meet the deadlines etc. Our level of anxiety decreases once we come out of such situations, However, it is important to look at certain situations when the individual remains anxious irrespective of the situation and is unable to cope with it. When this happens, the person is said to be suffering from anxiety disorder/s. There are several anxiety disorders that have been identified by DSM-5, like generalized anxiety disorder, specific phobia, social phobia, panic disorder, and agoraphobia. But before we delve further into these disorders, let us first understand about anxiety and other similar conditions such as fear and panic.

Distinction between Anxiety, Fear, and Panic

The most common way to distinguish fear and anxiety has been in the terms of an actual external stimulus that is perceived as a real danger/ threat by most people. **Fear** is experienced in the presence of real danger/ threat whereas **anxiety** is experienced only in anticipation of danger/threat when such a danger/threat is not present or cannot be specified. Several

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researchers have distinguished between fear, panic, and anxiety in terms of cognitive/subjective, physiological, and behavioral components (e.g., Barlow, 2002; Bouton, 2005; & Grillon, 2008). These components are loosely associated, i.e., every individual may not necessarily experience all the three components. Thus, someone having fear or anxiety may experience cognitive and physiological component with greater intensity than the behavioral component and vice versa (Carson, Butcher, Mineka, & Holley, 2013).

Cognitive/Subjective: "I am afraid

Fig. 2.1 Components of Fear

Panic, like fear has all the above three components. However, additionally, panic attack is characterised by subjective feelings of impending doom, fear of dying, going crazy and losing control. Anxiety on the other hand is a more diffused, future-oriented state that comprises of a complex blend of cognitions and emotions.

It needs to be noted here that all of us experience fear, anxiety and feelings of panic some time or the other. However, these become causes of concern when these are intense, persistent, interfere in our daily functioning, negatively affect our adjustment in different aspects of our life, and impact our health and well-being. In these cases, it becomes a mental health condition and disorder to be treated by mental health professionals. Socio cultural context needs to be taken into account by the healthcare workers while treating as it plays a significant role in influencing the manifestation, progression and intervention in case of anxiety disorders. However, more research needs to be done in exploring the effectiveness of context-specific techniques and interventions for dealing with anxiety disorder as studies (Trivedi & Gupta, 2010) indicate, there is lack of research in India with regard to epidemiology, phenomenology, course, outcome, and management of anxiety disorder.

Fig. 2.2 Components of Anxiety

8.3 PHOBIA: CLINICAL FEATURES, CAUSES AND TREATMENT CLINICAL FEATURES

"A phobia is a persistent and disproportionate fear of a specific object or situation that presents little or no actual danger to a person" (Carson, Butcher, & Mineka, 2003). DSM-5 has identified three categories of phobias: **specific phobia, social phobia and agoraphobia**.

Now, we will discuss the above mentioned phobias, separately.

(1) Specific Phobias

Specific phobia is diagnosed when a person shows strong and persistent fear which is triggered by a specific object or situation. On encountering a phobic stimulus, the person with specific phobia show an immediate fear response that resembles a panic attack except for the presence of a clear external trigger (APA, 2013). They experience anxiety on anticipation of the phobic stimulus and go to great lengths to avoid it. The person is fearful and avoids even the mere representations (picture/model) of the phobic stimulus. Most often, the person has an insight about one's condition, that is, the person recognizes that the response to a phobic stimulus is unreasonable or excessive.

Box 8.1: Criteria for Specific Phobia according to DSM-5 (APA, 2013)

A. Marked and persistent fear that is excessive or unreasonable, cued by the presence or anticipation of a specific object or situation (e.g., flying, heights, animals, receiving an injection, seeing blood).

B. Exposure to the phobic stimulus almost invariably provokes an immediate anxiety response, which may take the form of a situationally bound or situationally predisposed Panic Attack.

   Note: In children, the anxiety may be expressed by crying, tantrums, freezing, or clinging.

C. The person recognizes that the fear is excessive or unreasonable.

   Note: In children, this feature may be absent.

D. The phobic situation(s) is avoided or else is endured with intense anxiety or distress.

E. The avoidance, anxious anticipation, or distress in the feared situation(s) interferes significantly with the person's normal routine, occupational (or academic) functioning, or social activities or relationships, or there is marked distress about having the phobia.

F. In individuals under age 18 years, the duration is at least 6 months.

G. The anxiety, panic attacks, or phobic avoidance associated with the specific object or situation are not better accounted for by another mental disorder, such as Obsessive-Compulsive Disorder (e.g., fear of dirt in someone with an obsession about contamination), Post-Traumatic Stress Disorder (e.g., avoidance of stimuli associated with a severe stressor), Separation Anxiety Disorder (e.g., avoidance of school), Social Phobia (e.g., avoidance of social situations because of fear of embarrassment), Panic Disorder with Agoraphobia, or Agoraphobia without history of Panic Disorder.

DSM- 5 defines ***five types of specific phobias***:

- Animal*:* These include fears of animals such as dogs, cats, spiders, bugs, mice, rats, birds,fish, and snakes.
- Natural Environment: These include fears of heights, storms, and being near water.
- Blood-Injection-Injury: These include fears of seeing blood, receiving a blood test or injection, watching medical procedures on television, and for some individuals, even just talking about medical procedures.
- Situational: These include fears of situations such as driving, flying, elevators, tunnels, and enclosed places.
- Others *:* These include other specific fears, including fears of choking or vomiting after eating certain foods, fears of balloons breaking or other loud sounds, or fears of clowns, or 'space phobia' where the person has a fear of falling down if he/she is away from walls or support).

(2) **Social Phobia** is a fear of social situations. A person is afraid of acting in a humiliating or embarrassing way when he/she is exposed to the scrutiny of others. Social phobia may be specific to a situation such as fear of public speaking or generalised as in fear of many different social interactions.

(3) **Agoraphobia** was traditionally thought to be a fear of "*agora*", Greek word for public places of assembly (Marks, 1987). Thus it is a fear of being in a publc place or crowded places such as shopping malls, theaters etc. where there can be large gatherings. It mainly involves a fear of having a panic attack in situations where escape might prove to be difficult or embarrassing.

Comorbidity: People who suffer from specific phobia are likely to suffer from other anxiety disorders also (Crum and Pratt, 2001).

Prevalence, age of onset, and gender differences: Lifetime prevalence for specific phobias is 12 percent which implies that these phobias are quite common (Kessler, Chiru et al., 2005c). In India, however, prevalence rate has been reported to be 4.2 percent which is significantly lower as compared to other countries (Reddy & Chandrashekar, 1998). Despite being very common, people with specific phobias are less likely to seek treatment than people with other anxiety disorders. The most common specific phobias are fears of spiders, snakes, and heights. Phobias also depend on culture, e.g., in China, "Paleng" is a fear of cold, in which the person fears that loss of body heat may be life threatening.

The age of onset for specific phobias varies depending on the fear. Animal phobias, storm phobias, blood-injection-injury phobias and dental phobias typically begin in early childhood. The average age of onset for height phobias is in the teens, whereas specific phobias of enclosed places (claustrophobia) and driving phobia often begin in adolescence and early adulthood (Barlow, 2002a).

Some specific phobias (e.g., spiders, storms) are much more common among women than men, whereas others (e.g., blood phobias) are equally

found in men and women. Lifetime prevalence is about 7 percent for men and 16 percent for women (Kessler et al., 1994).

General characteristics of people with phobias

- People with phobias usually know that their fears are somewhat irrational, but they cannot help themselves;
- If they attempt to approach the phobic situation, they are overcome with fear or anxiety, which may vary from mild feelings of apprehension and distress to a full-fledged activation of the fight or flight response very similar to panic attack;
- Phobic behavior tends to be reinforced by the reduction in anxiety that occurs each time a feared situation is avoided; and
- Phobias may sometimes be maintained by secondary gains, such as, increased attention, sympathy, and some control over the behavior of others. These benefits are usually not in awareness of the sufferer.

Causes of Phobia

The causes of specific phobias are complex, involving biological factors, a history of negative experiences in the feared situation as well as other psychological factors, and evolutionary factors.

(1) Biological Perspective

Genetic Factors: The speed and strength of conditioning of fear is determined by genetic and temperamental variables (Hettema, et al., 2003; Oehlberg & Mineka, 2011). This means that phobias are acquired as a result of genetic makeup or temperament and personality. People who are carriers of one of the two variants on the serotonin-transporter gene which is linked to high neuroticism are more likely to be conditioned to fear stimuli (Lonsdorf et al., 2009). Related to these findings, Kagan et al. (2001) reported that behaviorally inhibited (shy, timid) toddlers showed a higher risk for the development of multiple specific phobias at 7-8 years of age than were uninhibited toddlers. Studies have also indicated a modest genetic contribution, for example, Fyer et al. (1995) reported an elevated risk of specific phobias in first-degree relatives of those who had been diagnosed with specific phobia. Twin studies on females and males found a higher concordance rate for animal phobias in MZ than DZ twins (Kendler et al., 1999; Hettema et al., 2005). The same studies have also reported the effect of the non shared environment on the origin of specific phobias which implies the role of other factors, such as psychological and socio-cultural in the acquisition of specific phobias.

(2) Psychological Perspective

Psychoanalytic Viewpoint: According to Freud, phobias represent a defense against anxiety that stems from repressed impulses of the id. As it is too dangerous to know the repressed id impulse, the anxiety is displaced (defense mechanism: displacement) onto an external object or situation that has some symbolic relationship to the feared object. Freud (1909) explained the development of phobia with the case study of little Hans, a five-year old boy with a phobia of horses. Freud suggested that Hans's phobia was developed as a result of anxiety due to Oedipus complex. Hans unconsciously hated

his father and wanted to kill him and possess his mother. This led to a fear in Hans that his father would kill or castrate him for having such negative feelings. Since these unconscious conflicting thoughts were not acceptable to the conscious mind, the anxiety created was displaced onto horses as these symbolically represented his father. This explanation was criticized as being far too speculative by many researchers and an alternative explanation of Hans' phobia in terms of the learning theory was provided by behavioral theorists.

Behavioral Perspective: In the development of phobias, the behavioral theorists focus on;

- Learned Behavior: Wolpe and Rachman in 1960 suggested that Hans' horse phobia originated from an instance of traumatic classical conditioning. He had witnessed an accident in which a horse was badly hurt. It upset him so much that he started to avoid leaving the house so as not to encounter the horses in the street. Several research studies by other theorists also supported the role of classical conditioning principals in acquisition of phobias. An individual learns to fear a previously neutral stimulus which is paired with a noxious object or event. Once a phobia is acquired it gets generalized to similar objects or events. In a survey conducted by Osr and Hugdahl (1981), fifty eight percent of the respondents attributed their phobia to a traumatic conditioning situation. Further, direct conditioning may be especially common in the onset of dental phobia (Kent, 1997), claustrophobia (Rachman, 1997), and accident phobia (Kuch, 1997).
- Vicarious or Observational Learning: Phobias can be acquired by merely observing another person who acts fearfully to a given object or situation (Ost & Hugdahl, 1981). For example, lab reared rhesus monkeys who were not initially afraid of snakes rapidly developed phobia of snakes after observing their wild reared counterparts behaving fearfully with snakes (Mineka & Cook, 1993). Similar observations were reported when lab reared monkeys watched the videotape of wild reared monkeys behaving fearfully with snakes. This implies that phobias can be developed through mass media also (Mineka & Sutton, 2006). This involves informational learning where an individual learns to fear a particular object or situation by hearing or reading that the situation is dangerous, for example, learning to fear flying by hearing about plane crashes in the news, or learning to fear driving by continually receiving warnings from others that driving is dangerous.

  Cognitive Perspective: Cognitive factors, such as attention, memory, cognitive biases help to maintain the phobias that have been acquired. Generally, people with specific phobias tend to ***pay more attention to threatening information*** that relates to their fear (Mineka, 1992). For example, individuals with spider phobias are often the first people to spot a spider if there is one in the room. People with phobias also tend to have ***distortions in their memories*** for encounters with the objects and situations they fear. For example, people with an animal phobia may remember the animal that they have encountered as larger, faster, or more frightening than it was. Further, people with specific phobias

tend to ***hold beliefs and to interpret situations*** in such a way as to maintain or increase their anxiety (Ohman & Mineka, 1999). For example, people with a fear of height may assume that they are more likely to fall. People who fear enclosed places, such as elevators, may believe that they will run out of air, or that they will be unable to escape. Lastly, ***avoidance of feared situations*** prevents people with specific phobias from learning that the situations they fear are not as "dangerous" as they feel. In addition, relying on ***"safety behaviors"*** (e.g., driving extra slowly to avoid an accident, always wearing shoes to prevent insects from touching one's feet) can also help to maintain a person's fears.

(3) Evolutionary Perspective

Our evolutionary history has affected which stimuli are likely to be feared, e.g., snakes, water, heights, enclosed spaces are more likely to be objects of fear than bicycles, knives, cars, even though the latter objects may be at least as likely to be associated with trauma. Primates and humans have a biological preparedness to rapidly associate certain kinds of objects- such as snakes, spiders, water and enclosed spaces with aversive events. It has been suggested that this preparedness may have been a selective advantage (e.g., helped in survival) for our ancestors in the course of evolution (Mineka & Ohman, 2002). Ohman (1996) has provided two lines of evidence to support the preparedness theory of phobias. First, in case of human participants, fear was conditioned more effectively to fear relevant stimuli such as snakes and spiders than to fear irrelevant stimuli such as flowers and vegetables. In case of primates, lab reared monkeys with no prior experience to fear relevant stimuli also showed conditioning for fearing relevant than irrelevant stimuli.

Treatment of Phobia

The main treatment options for phobia are as follows:

(1) Exposure Therapy

The client is exposed to the feared object, animal, or place in a controlled environment (Choy et al., 2007). There are various forms of the exposure therapy, for example, systematic desensitization, flooding, virtual reality. *Systematic desensitization* is based on the premise that one cannot be anxious and relaxed at the same time. It is conducted in several steps. Firstly, with the help of client, a hierarchy of the fear eliciting situation is formed, beginning from the least fear producing to the most fear producing situation, e.g., dog barking in the next lane to the dog barking just in front of the client. Secondly, the client is taught relaxation exercises, such as progressive muscle relaxation, deep breathing. Then the person is asked to relax and imagine the fear producing situation in the ascending order of the hierarchy, beginning from the least fear producing situation. Gradually, the client learns to relax in the most fear producing situation, thereby extinguishing phobia. An opposite of this technique is *Flooding*, where the client is exposed to the most fear producing situation and is taught that he/she can go through the fear producing situation without being harmed contrary to his/her expectation of getting hurt. Earlier therapists used the

real situations or imagination (if the situation was hazardous), whereas now therapists use *virtual reality*. In this type of therapy, the therapists with the help of computers and other equipment simulate the fear producing situation, e.g., heights, air travel and the client is exposed to the simulation exercise. Through all these techniques, the client realizes the irrationality of his/her fear and thus the fear gets extinct.

(2) Modeling

Based on Bandura's (1977) vicarious learning theory, the client either observes another person (sometimes the therapist) in real life or in a movie, acting fearlessly in a situation that causes phobia in the client. By watching another person acting fearlessly and calmly, the client also learns that the phobic situation or the stimulus is harmless, which helps to treat phobia.

While the behavior therapies have been found to be effective in treating phobia, medication and cognitive techniques, such as cognitive restructuring, have not been found to be effective. According to the recent findings, a drug, called d-cycloserine, when used in conjunction with exposure therapies like virtual reality, has been found to increase the effectiveness of exposure therapies (Norberg et al., 2008).

Self Assessment Questions 1

1. Fear is experienced in _____ danger whereas anxiety is experiences in _____ danger.
2. Name the three categories of phobia.
3. In _____ technique, the client is exposed to the most fear producing situation.
4. In _____ therapy, the therapist simulates the fear producing situation with the help of computers and other equipment.
5. Phobias represent a defense against anxiety that stems from repressed impulses of the id. This is the _____ perspective of phobia.

8.4 SOCIAL ANXIETY DISORDER: CLINICAL FEATURES, CAUSES AND TREATMENT

Clinical Features

Social anxiety disorder (SAD) is also called as Social phobia which is a persistent, irrational fear generally linked to the presence of other people and can be extremely debilitating. However, the difference between social phobia and social anxiety disorder is largely chronological, in that social phobia is the former term and SAD is the current term for the disorder. The official psychiatric diagnosis of social phobia was introduced in the third edition of the Diagnostic and Statistical Manual (DSM-III). Social phobia was described as a fear of performance situations and did not include fears of less formal situations such as casual conversations.

DSM-5 describes social anxiety disorder as "disabling fears of one or more specific social situations (such as public speaking, urinating in a public bathroom, or eating or writing in public) where the person fears of being exposed to the scrutiny and potential negative evaluation of others or that

one may act in an embarrassing or humiliating manner". Therefore, the person tries to avoid such social situations or when avoidance is not possible endures them with great distress. There are two subtypes of SAD according to DSM-5, one is specific to performance situations, e.g., public speaking, and the other is general or in non-performance situations, e.g., eating in public.

Selective mutism can be considered as one variant of social anxiety disorder. Mostly seen in children, selective mutism involves the inability of the child to speak in specific situations whereas s/he is able to speak normally in other situations. For example, while the child speaks well at home, she fails to verbalize at school because of experiencing higher levels of social anxiety. They fail to communicate in selective situations/contexts despite the ability to speak in other situations.

Box 8.2: Criteria for Social Anxiety Disorder according to DSM-5 (APA, 2013)

A. A marked or persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way (or show anxiety symptoms) that will be humiliating or embarrassing.

   Note: In children, there must be evidence of the capacity for age-appropriate social relationships with familiar people and the anxiety must occur in peer settings, not just in interactions with adults.

B. Exposure to the feared social situation almost invariably provokes anxiety, which may take the form of a situationally bound or situationally predisposed Panic Attack.

   Note: In children, the anxiety may be expressed by crying, tantrums, freezing, or shrinking from social situations with unfamiliar people.

C. The person recognizes that the fear is excessive or unreasonable.

   Note: In children, this feature may be absent.

D. The feared social or performance situations are avoided or else are endured with intense anxiety or distress.

E. The avoidance, anxious anticipation, or distress in the feared social or performance situation(s) interferes significantly with the person's normal routine, occupational (academic) functioning, or social activities or relationships, or there is marked distress about having the phobia.

F. In individuals under age 18 years, the duration is at least 6 months.

G. The fear or avoidance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition and is not better accounted for by another mental disorder (e.g., Panic Disorder With or Without Agoraphobia, Separation Anxiety Disorder, Body Dysmorphic Disorder, a Pervasive Developmental Disorder, or Schizoid Personality Disorder).

H.	If a general medical condition or another mental disorder is present, the fear in Criterion A is unrelated to it, e.g., the fear is not of Stuttering, trembling in Parkinson's disease, or exhibiting abnormal eating behaviour in Anorexia Nervosa or Bulimia Nervosa.

*Comorbidity***:** People who suffer from SAD are also likely to suffer from one or more anxiety disorders and depressive disorder (Ruscio et al., 2008). Generalized SAD has been found to be comorbid with depression and alcohol abuse (Wittchen, Stein, & Kessler, 1999). Specific SAD is comorbid with GAD, specific phobias, panic disorder, avoidant personality disorder, mood disorders and alcohol abuse (Crum & Pratt, 2001).

Prevalence, age of onset, gender differences and cultural factors: SAD is common and found even in public celebrities, for example, Barbara Streisand (American actor and singer). Its lifetime prevalence is 12 percent of a given population (Ruscio et al., 2008). In India, prevalence rate of 12.8 percent has been found in the adolescents (Mehatalia & Vankar, 2004). It is a persistent disorder with spontaneous recovery shown by only 37 percent of the sufferers over 12 years (Bruce et al., 2005).

SAD usually begins during early or middle adolescence or early adulthood (Ruscio et al., 2008). SAD is more common among women than men as 60 percent of the women have been reported to suffer from the disorder. SAD is also affected by cultural factors. Example, in Japan, fear of giving offense to others is very important, whereas in USA, fear of being negatively evaluated by others is a source of social anxiety.

General characteristics of people with SAD

- The individual usually tries to avoid situations in which she /he might be evaluated and reveal signs of anxiousness or behave in an embarrassing way;
- Fears concerning excessive sweating or blushing are common;
- Speaking, performing in public, eating in public, using public lavatories, etc. can elicit extreme anxiety; and
- They often work in occupations or professions far below their talent or intelligence because their extreme social sensitivity does not allow them to work in situations which involve interactions with people.

Social anxiety disorder is different from Separate anxiety disorder

Separation anxiety disorder is mostly seen in children and to some extent in adolescents and even in adults. It involves a fear of separation from the caregiver or major attachment figures. The child experiences distress when not around the caregiver and is concerned that they would be alone if something happens to their caregiver. Instances of refusal to go outside the home or to the school alone is normal in very small children, but they usually outgrow it and develop independence. However, those who develop clinical levels of fear and anxiety related to separation from their caregiver can have separation anxiety disorder, They may also experience nightmares related to separation and exhibit symptoms of headache or stomach pain.

Causes of Social Anxiety Disorder

Let us understand the casual factors for social anxiety diorder.

(1) Biological Perspective

Genetic and Temperamental Factors: Results from a very large study of female twins suggests a variance of 30 percent due to genetic component in development of SAD (Smoller et al., 2008). Family studies also show that first degree relatives of probands were more than two to three times as likely to also share a diagnosis. Further, infants easily distressed by unfamiliar stimuli are at an increased risk for becoming fearful during childhood and by adolescence, show increased risk of developing social phobia (Kagan, 1997).

(2) Psychological Perspective

Behavioural Explanation: SAD in many cases is a result of direct or vicarious classical conditioning. In a study, 56 percent of people with specific SAD and 44 percent with generalized SAD reported direct traumatic conditioning experiences (Townsley et al., 1995). People with generalized SAD may be especially likely to have grown up with parents who were socially isolated or who devalued sociability, thus providing ample opportunity for vicarious learning (Rosenbaum et al., 1994). Also, many people with social phobia reported to develop it while having problems in fitting in within their peer group (Harvey et al., 2005).

Cognitive Factors: Socially anxious people are more concerned about evaluation than people who are not anxious (Goldfried, Padawer, & Robins, 1984) and are more aware of the image they present to others (Bates, 1990). They tend to view themselves negatively even when they have actually performed well in social interactions (Wallace & Alden, 1997). In a study by Davison & Zighelboim (1987) which used *articulated thoughts in simulated situations*, it was reported that people with social phobia showed more negative articulated thoughts in a stressful situation in comparison to people without social phobia. Persistent and irrational fears actually occurs because fear is elicited through early automatic processes that are not available to conscious awareness. After this initial processing the stimulus is avoided, so it is not processed fully enough to allow the fear to extinguish (Amir, Foa, & Coles, 1998).

Social Skills Deficit Model: According to this model, inappropriate behaviour or a lack of social skills is the cause of social anxiety. The individual has not learned how to behave so that he/she feels comfortable with others. The person repeatedly commits faux pas (*tactless mistake*), person is awkward and socially inept often criticized by social companions. Support for this model comes from findings that socially anxious people are indeed rated as being low in social skills (Twentyman & McFall, 1975).

Perception of Uncontrollability and Unpredictability: Submissive and unassertive behaviour which is a characteristic feature of people with social phobia is a result of uncontrollability and unpredictability in life situations. People with social phobia have a diminished sense of personal control over events in their lives (Cloitre et al., 1992).

(3) Evolutionary perspective

According to Ohman et al., 1985, social phobias may have developed as a "by-product of dominance hierarchies". Aggressive encounters between members of a social group establish dominance hierarchies where a defeated individual usually displays fear and submissive behavior but rarely escapes from the situation. Thus, people with social phobia are more likely to endure being in the feared situation than to run away. Perhaps, social phobias develop mostly in adolescence and early adulthood when dominance conflicts are most prominent.

Preparedness and Social Phobia: Ohman and colleagues (1985) have suggested that we humans may have an evolutionary based predisposition to acquire fears of social stimuli that signal dominance and aggression (e.g., anger or contempt) from other humans. The researchers have reported that participants develop stronger conditioned responses when slides of angry faces are paired with mild electric shock than when happy or neutral faces are paired with the same shocks. Further, even very brief presentations of the angry face that are not consciously perceived are sufficient to activate the conditioned responses (Ohman, 1996).

Treatment of Social Phobia

Main treatment options used by people for social phobia are:

(1) Cognitive-Behavioral Therapy:

Cognitive restructuring along with behavioral techniques has been proved to be more effective as compared to lone use of behavioral therapy (Barlow et al., 2007). The distorted cognitions of client that lead to social phobia, such as, "nobody likes me"; "people do not find me attractive" are identified and the therapist helps the client to restructure such negative cognitions through reanalysis. During the reanalysis, the client is educated about the origin of cognitive distortions, the automatic negative thoughts and how these affect the client's social behavior and restructuring such thoughts by cognitive techniques, for example, questioning the validity of such negative thoughts, taking negative thoughts as hypotheses and logically testing those hypotheses. The clients are also encouraged to do exercises where they are taught to shift their focus from self to others and the situations. Videotaping their social interactions has also been successfully used as a feedback mechanism (Mörtberg et al., 2007).

(2) Medications:

Research has also shown that medications such as antidepressants (e.g., Monoamine Oxidase Inhibitors, or MAOIs and Selective Serotonin Reuptake Inhibitors, or SSRIs) have been proved to be effective treatment for social phobia (Ipser et al., 2008). However, further comparative research in this area has reported the cognitive-behavior therapy to be more effective than the medications as it does not involve side effects and relapse rates are also low (Stein & Stein, 2008). Lastly, researchers such as Guastella et al. (2008) have reported that a medication, named D-cycloserine taken in conjunction with cognitive-behavior therapy led to faster rates of successful treatment.

8.5 PANIC DISORDER: CLINICAL FEATURES, CAUSES AND TREATMENT

Clinical Features

DSM-5 defines a panic attack as a discrete period of intense fear or discomfort, in which at least four from a list of 13 standard symptoms develop abruptly and reach a peak within 10 minutes. Although the symptoms must peak within 10 minutes, the attacks often peak within a few seconds and the symptoms gradually subside over a period lasting from a few minutes to about half an hour.

Box 8.3: Criteria for Panic Disorder according to DSM-5 (APA, 2013)

A. Recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four (or more) of the following symptoms occur:

Note: The abrupt surge can occur from a calm state or an anxious state.

1) Palpitations, pounding heart, or accelerated heart rate.
2) Sweating.
3) Trembling or shaking.
4) Sensations of shortness of breath or smothering.
5) Feelings of choking.
6) Chest pain or discomfort.
7) Nausea or abdominal distress.
8) Feeling dizzy, unsteady, light-headed, or faint.
9) Chills or heat sensations.
10) Paresthesias (numbness or tingling sensations).
11) Derealization (feelings of unreality) or depersonalization (being detached from oneself).
12) Fear of losing control or "going crazy."
13) Fear of dying.

Note: Culture-specific symptoms (e.g., tinnitus, neck soreness, headache, uncontrollable screaming or crying) may be seen. Such symptoms should not count as one of the four required symptoms.

B. At least one of the attacks has been followed by 1 month (or more) of one or both of the following:

1) Persistent concern or worry about additional panic attacks or their consequences (e.g., losing control, having a heart attack, "going crazy").
2) A significant maladaptive change in behavior related to the attacks (e.g., behaviors designed to avoid having panic attacks, such as avoidance of exercise or unfamiliar situations).

C)	The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism, cardiopulmonary disorders).
D)	The disturbance is not better explained by another mental disorder (e.g., the panic attacks do not occur only in response to feared social situations, as in social anxiety disorder; in response to circumscribed phobic objects or situations, as inspecific phobia; in response to obsessions, as in obsessive-compulsive disorder; in response to reminders of traumatic events, as in posttraumatic stress disorder; or in response to separation from attachment figures, as in separation anxiety disorder).

It is clear from the above list that out of 13, majority (1 to 10) of the symptoms are physical whereas only last three are cognitive symptoms. In addition to these symptoms, panic attacks may be accompanied by other symptoms as well (e.g., blurred vision).

Panic attacks are experienced across all the anxiety disorders, triggered by a feared situation object/situation/thought/worry. Many people without an anxiety disorder may experience panic attacks from time to time (e.g., when giving a formal presentation or taking an exam, or upon encountering some other stressful situation). Panic attacks occur frequently in the general population, with some studies showing that up to a third of individuals experience a panic attack during a given year. Unlike most panic attacks, which are typically triggered by stress, worries, or feared situations, the panic attacks that occur in panic disorder often occur out of the blue, without any obvious trigger or cause.

Types of Panic Attacks

Cued or situationally predisposed panic attacks: Panic attacks linked to specific situations such as, driving a car. They are strongly associated with situational triggers.

Uncued panic attacks: Attacks may occur in unexpected or benign states or in the absence of any provocation, e.g., in sleep which is known as nocturnal panic.

In case of some people, panic disorder may lead to agoraphobia. In DSM-5 panic disorder is diagnosed as with or without agoraphobia. The term agoraphobia comes from the Greek word, *agora* which means *market*; hence it means a *"fear of the marketplace."* Though it implies a fear of open spaces, however, people having agoraphobia are much more fearful of enclosed spaces, such as tunnels, small rooms, and elevators. Some people with panic disorder develop a concern that they will not be able to make an exit from a crowded place if they have a panic attack. Hence, they avoid going to places where they believe that their escape would be difficult in an emergency (i.e., panic attack) and it would cause embarrassment to them. At first, people avoid those situations where they developed agoraphobia but soon it gets generalized and they begin to avoid not only places outside home, such as market, elevators, public transport but sometimes places within home also, e.g., attic, terrace which they believe would be difficult to escape from. Most but not all, people with panic disorder develop at least

some degree of agoraphobia. In extreme cases, an individual with panic disorder and agoraphobia may not leave the house at all. Usually people with agoraphobia are able to leave the house, if someone they know accompanies them whom they believe will be able to help them in making a safe exit in case of a panic attack.

*Comorbidity***:** Many people (83 percent approximately) suffering from panic disorder with or without agoraphobia also have some other psychological disorder such as GAD, specific phobia, social phobia, depression, substance use disorder (such as smoking and alcohol consumption) and avoidant personality disorder (Bernstein et al., 2006).

Prevalence, gender differences and age of onset: Lifetime prevalence for panic disorder with or without agoraphobia has been reported to be 4.7 percent, but panic disorder without agoraphobia is more prevalent. Prevalence varies cross-culturally, e.g., in Africa; it was diagnosed in about 1percent of men and 6 percent of women (Hollifield et al., 1990). In Taiwan, prevalence is quite low, perhaps because of a stigma about reporting a mental problem (Weissman et al., 1997). Among the Eskimo of west Greenland, e.g., *Kayak Angst* occurs in seal hunters who are alone at sea. Attacks involve intense fear, disorientation, and concerns about drowning.

Panic Disorder with and without agoraphobia is more prevalent in women than in men with a prevalence of 5 percent and 2 percent, respectively (Kessler, Chiu, et al., 2005c). About 80 to 90 percent of patients with agoraphobia are reported to be women (White & Barlow, 2002). However, evidence has been found that men with agoraphobia often indulge in self-medication with nicotine and alcohol to endure panic attacks and often do not develop avoidance behavior as has been found in agoraphobia (Starcevic et al., 2008). Panic disorder is a debilitating disorder. Though its symptoms may increase or decrease at times however, it has a chronic course. Recovery may take a long time (12 years as reported in a longitudinal study) with recurrence in 58 percent of the patients (Bruce et al., 2005).

The age of onset has been found to be 23 to 34 years on an average. For women it usually starts in 30s or 40s (Kessler, Chiu, et al., 2006). Its onset is associated with stressful life experiences (Pollard, Pollard, & Corn, 1989).

Causes of Panic Disorder

The causes of panic disorder involves the interplay of many factors.

(1) Biological Perspective

Genetic Variables: Family and twin studies have pointed toward a genetic component in the development of panic disorder. Kendler et al. (2001) reported a variance of 33 to 43 percent due to genetic factors in a large twin study that analyzed the factors for inheritability of panic disorder. Like other anxiety disorders, people with neuroticism are more likely to develop panic disorder. Recently, researchers have attempted to find specific genes that are responsible for inheriting panic disorder. However, Strug et al., 2010; Klauke et al., 2010, found no unequivocal results.

Brain Activity: Earlier theories suggested the role of locus coeruleus (LC) in the brain stem and norepinephrine, a neurotransmitter particularly involved in the activity of LC in causing panic attacks. Stimulation of this area in

the monkeys causes a panic attack. Hence, it was suggested that naturally occurring attacks might be due to over activation of norepinephrine in LC (Redmond, 1977). Research with humans also found that Yohimbine, a drug that stimulates activity in LC could elicit panic attack in patients with panic disorder (Charney et al., 1987). However, more recent research is not consistent with this position, for example, drugs that block firing in the LC were unable to treat patients with panic disorder (McNally, 1994). Later research found that an overactive amygdala rather than LC is implicated in panic disorder. Amygdala consisting of a group of nuclei is located in front of the hippocampus in the limbic system and its role in emotion of fear has been established through empirical research. Stimulation of amygdala stimulates LC and other autonomic responses occurring during panic attack (Gorman et al., 2000). Amygdala is said to be at the center of the "fear network" and is connected to the lower brain areas like LC as well as higher cortical areas like prefrontal cortex. Hence, panic attacks may occur either due to stimulation of lower or higher areas of brain.

Dysfunctional Biochemistry: Klein (1981) and Sheehan (1982) hypothesized that biochemical dysfunctions lead to panic attacks which are the alarm reactions. For more than two decades this hypothesis was supported by several studies. These studies showed that in comparison to normative group, when people with panic disorder are exposed to panic provocation procedure, they are more likely to suffer from panic attacks. The panic provocation procedure involves exposure to biological challenges, such as inhaling air with higher than normal level of carbon dioxide (Woods et al., 1987), taking large amounts of caffeine (Uhde, 1990), infusing sodium lactate into the body (Gorman et al., 1989), to induce intense physical symptoms such as palpitations, high blood pressure and hyperventilation that is likely to evoke a panic attack. The noradrenergic and serotonergic systems are known to be involved in panic attacks (Graeff & Del-Ben, 2008). The noradrenergic system gets activated due to stress and in turn leads to cardiovascular symptoms which provoke panic attack. On the other hand, serotonergic system's activation decreases the noradrenergic activity. This has been supported by the medication results, as drugs used for treatment of panic disorder not only decrease the noradrenergic activity, but it also increases the serotonergic activity. Another neurotransmitter, GABA, which has an inhibitory effect on anxiety has also been found to be abnormally low in people with panic disorder. Thus, such people suffer from anxiety in anticipation of suffering from another panic attack.

(2) Psychological Perspective

Behavioral Factors: Several researchers have suggested that a comprehensive learning theory can account for the development of panic disorder (Bouton, 2005; Mineka & Zinbarg, 2006). Goldstein and Chambless (1978) have studied the effect of interoceptive (internal to body) and exteroceptive (external to body) stimuli in conditioning of panic disorder. Through classical conditioning, interoceptive cues like heart palpitations, stomach ache, and exteroceptive cues such as a place or presence of specific people that were present during the initial panic attack, gets associated with it and later on act as triggers for anxiety about future panic attacks (Acheson et al., 2007). In simple words, people end up developing a "panic" about a

"panic attack"! This also explains the agoraphobic avoidance of places like markets or shopping malls as these serve as exteroceptive cues for an oncoming panic attack. Inhibitory learning which is required for extinction of a conditioned response has been suggested to be impaired in panic disorder, thus people with panic disorder are unable to learn to discriminate the conditioned stimulus as a safety cue (Lissek et al., 2009). However, panic attacks sometimes seem to be uncued, i.e., no trigger, internal or external, seems to be present before the panic attack. This is because panic attack in some cases result from the internal cues that are unconsciously experienced by the individual. This can be understood with an example of a person frightened of a racing heart and who while feeling happy and excited gets a panic attack and is unable to understand the reason of it as he/she was happy. The panic attack in this case occurred because while feeling happy and excited the person's heart raced which served as a cue (though not in awareness of that person) for the panic attack (Mineka & Zinbarg, 2006).

Cognitive factors: People with panic disorder have hypersensitivity for their bodily sensations which are interpreted by them as a sign of an impending panic attack (Beck & Emery, 1985; D. M. Clark, 1986, 1997). The tendency to interpret bodily sensations as a sign of impending catastrophe such as a heart attack, tumors etc. has been called *catastrophizing* by Clark.

Such frightening thoughts start the vicious cycle as it increases the already present physical symptoms of anxiety which in turn increase the catastrophic thoughts which in turn triggers the panic attack. It should be noted that the person may be unaware about catastrophizing as these thoughts are out of consciousness (Rapee, 1996). Beck has called these thoughts as automatic thoughts which actually trigger the panic attack. However, the cause of developing catastrophizing thoughts is not known, nevertheless only those people who have a tendency for catastrophizing develop panic disorder (e.g., Clark, 1997). Evidence has been found in line with this theory, e.g., Clark (1997) and Teachman et al. (2007) have reported that individuals with panic disorder have a greater tendency to catastrophize their bodily sensations. This cognitive theory of panic disorder also predicts that model also predicts that the panic can be reduced or prevented by changing people's cognitions about their bodily sensations. Further, likelihood of panic attacks was significantly reduced when people suffering from panic disorder were given a detailed explanation of what physical symptoms to expect when injected with sodium lactase in a panic provocation study (Clark, 1997; Schmidt et al., 2006).

Both learning and cognitive theories provide explanations about panic attack, however the main difference between the two theories is the emphasis that the cognitive theory puts on the meaning that people with panic disorder give to their bodily sensations. Such interpretation of bodily sensations is not necessary for conditioning as the interoceptive or exteroceptive stimuli could be outside the realm of awareness (Bouton et al., 2001). In the light of this difference, learning theory is better able to account for uncued panic attacks as well as panic attacks while sleeping as both occur in the absence of automatic cognitions.

Anxiety Sensitivity and Perceived Control: Several explanations have been provided that can find support in both learning and cognitive perspectives.

For example, McNally (2002) and Pagura et al. (2009) found that people with hypersensitivity to anxiety are more likely to develop panic attacks and subsequently panic disorder. Interestingly, some studies have also shown the role of perceived control in reduction and even prevention of panic attacks, e.g., in a panic provocation study if a person has a control over inhalation of carbon-dioxide (inhalation of CO_2 is known to bring on panic), the possibility of suffering from a panic attack is reduced significantly or even blocked (e.g., Sanderson et al., 1989; Zvolensky et al., 1998, 1999). Further, Bentley et al. (2012) have shown that anxiety sensitivity interacts with perceived control for the development of panic attack, i.e., lower the perceived control, greater was the effect of anxiety effect on panic disorder. Lastly, higher the perceived control over emotions and threatening situations, lower was the agoraphobic avoidance as the person feels in control of the situation (Suarez et al., 2009; White et al., 2006).

Safety Behaviors and the Persistence of Panic: Panic disorder once developed is maintained despite contrary evidence. That is, someone who has always suffered from a panic attack about having a heart attack on finding his/her heart racing but never actually had a heart attack should understand that a racing heart does not lead to a heart attack. But this logic does not prevent a panic attack because each time the person was apprehending a heart attack he/she indulged in a "safety behavior" like slow breathing and believed that this "safety behavior" prevented the heart attack. Thus, the "safety behaviors" maintain the panic disorder. Thus, people with panic disorder should be persuaded to abandon the "safety behaviors" so that they could realize that their indulgence in safety behaviors does not prevent the heart attack or any other impending fatality like fainting (Clark, 1997; Salkovskis et al., 1996). Research suggests that dropping of safety behaviors by people with panic disorder increased the effectiveness of the treatment (Rachman et al., 2008).

Cognitive Biases and the Maintenance of Panic: People with panic disorder have a tendency for processing the threating information in a biased manner. For example, such people interpret the ambiguous bodily sensations as well as other ambiguous situations as more threatening than the people in the control group (Clark, 1997; Teachman et al., 2006). Also, such people have a biased attention also as they focus more on the threatening information, such as words indicating panic like palpitations, numbness, fainting etc. (Lim & Kim, 2005; Mathews & MacLeod, 2005).). fMRI studies have shown greater activation of memory areas that are involved in processing information about threatening stimuli in people with panic disorder than the normative group (Maddock et al., 2003). However, the role of biased information processing as a cause or as a symptom of panic disorder remains unclear.

Overall, it can be concluded that both biological and psychosocial factors have been found to play a role in the development of panic disorder and neither of the two in isolation can explain its development.

Treatment of Panic Disorder

The approches to treatment of panic disorder are as follows:

(1) Exposure Therapy

As explained in the above section on phobias, exposure therapy for agoraphobia and panic involves exposing the client to the feared situation for a long period of time often in the presence of the therapist or a family member. The underlying idea is that the client on being exposed to the feared situation for a long time without eliciting any harmful effects help him/her to realize the futility of his/her agoraphobia with panic attacks. This exercise has been shown to be effective in treating 60 to 75 percent of people with agoraphobia and a maintenance rate of 2-4 years (Barlow et al., 2007). A limitation of this therapy was that it did not deal with panic disorder specifically. Hence, another technique, known as *interceptive exposure* was devised to deal with panic attacks in 1980s. This technique involves causing internal bodily sensations such as spinning head, nausea, breathlessness which are associated with panic attacks with the help of activities like seating a client in a spinning or rocking chair. When the client undergoes a prolonged exposure to such situations without getting a panic attack, the association of the internal bodily cues to panic attacks gets extinct.

(2) Integrative technique

Cognitive restructuring integrated with exposure therapy used specifically to treat panic disorder is known as panic control treatment. It involves educating the client about the role of catastrophic automatic thoughts in causing and maintaining the panic disorder. During the therapy, the client is taught to identify the negative automatic thoughts and dispute those in a logical manner, using techniques like hypotheses testing and humor. Then the client is exposed to the panic eliciting situations (both internal bodily sensations and external cues) to develop tolerance against the discomfort caused by such situations. This helps the client to deal with panic causing situations efficiently. Research evidence has shown the integrative technique to be more effective than using either the exposure or cognitive restructuring technique alone (Arch & Craske, 2009). It has proven to be effective in 70-90 percent of clients and maintenance rate of 1 to 2 years has also been reported (McCabe & Gifford, 2009).

(3) Medications

Medicines like anxiolytics (anti-anxiety drugs) and antidepressants have also shown to be effective in treating agoraphobia and panic. Researches, however conclude that both drugs have advantages and disadvantages also. Anxiolytics which belong to the category of benzodiazepines include drugs like alprazolam or clonazepam which have been shown to treat acute episodes of extreme anxiety as these drugs work quickly (within 30-60 minutes). However, these also have side effects such as drowsiness, sedation, impaired cognitive as well as motor performance. Additionally, physiological dependence may also develop because of prolonged use and lead to withdrawal symptoms like sleep disturbance, dizziness and panic attacks. Relapse rate is also quite high (Pollack & Simon, 2009). Antidepressants including tricyclics, SSRIs and SNRIs (Serotonin-Norepinephrine Reuptake Inhibitors) used for treating panic disorder and agoraphobia also have advantages and disadvantages in comparison to anxiolytics. Some advantages of antidepressants are that these treat the

comorbid depression and do not lead to physiological dependence (Pollack & Simon, 2009). However, a disadvantage of antidepressants is that in comparison to anxiolytics, these take longer time (approx. 4 weeks) to act, hence, cannot be used in acute cases of panic disorder. Other side effects include, dry mouth, severe constipation, blurred vision etc. Lastly, relapse rates are quite high when discontinued (Roy-Byrne & Cowley, 2007).

Though a combination of cognitive-behavior therapy and medication therapy has found to be slightly more effective (Barlow et al., 2007). However, it has been found that once the medication is discontinued, relapse is common as perhaps many of the clients attribute their treatment gains to medication (Mitte, 2005). Nevertheless, a drug named D-cyloserine used in combination of CBT has shown promising results (Otto et al., 2009).

Self Assessment Questions 2

1. What are the two subtypes of social anxiety disorder?
2. According to which model, inappropriate behaviour or a lack of social skills is the cause of social anxiety?
3. Questioning the validity of negative thoughts can lead to _____ of thoughts.
4. The term agoraphobia according to its origin from the Greek word, means a fear of _____.
5. The term interoceptive refers to stimuli _____ to body, and exteroceptive refers to stimuli _____ to body.
6. Panic control treatment to treat panic disorder combines _____.

8.6 GENERALIZED ANXIETY DISORDER: CLINICAL FEATURES, CAUSES AND TREATMENT

Clinical Features

Generalized Anxiety Disorder (GAD) is a state of chronic, excessive and unreasonable worry about multiple life events or activities. Since anxiety is not anchored to a specific object or situation as in phobias, it was earlier described as free-floating anxiety (Butcher, Hooley, Mineka, & Dwivedi, 2017). Individual with GAD is persistently anxious often about minor things, and worry chronically (Davison, Neale, & Kring, 2004). People with GAD spend a great deal of time worrying about a wide range of topics and describe their worrying as uncontrollable (Ruscio, Borkovec, & Ruscio, 2001).

The clinical features of GAD, as per DSM-5, is given below in Box 8.4.

Box 8.4: DSM-5 Criteria for Generalized Anxiety Disorder (APA, 2013)

A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for a period of at least 6 months, about a number of events or activities (such as work or school performance).

B. The person finds it difficult to control the worry.

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months).

Note: Only one item is required in children.

1) restlessness or feeling keyed up or on edge
2) being easily fatigued
3) difficulty concentrating or mind going blank
4) irritability
5) muscle tension
6) sleep disturbances (difficulty falling or staying asleep, or restless unsatisfying sleep)

D. The focus of the anxiety and worry is not confined to features of an Axis I disorder, e.g., the anxiety or worry is not about having a Panic Attack (as in Panic Disorder), being embarrassed in public (as in Social Phobia), being contaminated (as in Obsessive-Compulsive Disorder), gaining weight (as in Anorexia Nervosa), having multiple physical complaints (as in Somatization Disorder), or having a serious illness (as in Hypochondriasis), and the anxiety and worry do not occur exclusively during Posttraumatic Stress Disorder.

E. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

F. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism) and does not occur exclusively during a Mood Disorder, a Psychotic Disorder, or a Pervasive Developmental Disorder.

(Note: No changes were made from DSM-IV to DSM-5)

Comorbidity

GAD is associated with functional impairment and increased risk of adverse health outcomes, including cardiovascular disease and suicide (Keller, 2002). It is also frequently found in conjunction with other psychiatric conditions, including depression (Wells & Butler, 1997; Brownet al., 2001), panic disorder, posttraumatic stress disorder, and social phobia (Kessler & Wittchenn, 2002).

Prevalence: GAD is common, with a prevalence rate of 3 percent for a period of any1 given year and a lifetime prevalence of 5.7 percent (Kessler, Berglund, Dealer, et al. 2005). Lifetime prevalence in India is 5.8 percent (Chandrashekar & Reddy, 1998).

*Age of onset***:** Nearly 60 to 80 percent people with GAD report that they have been anxious for as long as they remember whereas many others have reported a slow and insidious onset (Roemer et al., 2002). It is difficult to determine the age of onset, but research has suggested that older adults

often develop it and it is the most common anxiety disorder for them (e.g., Mackenzie et al., 2011).

*Course***:** GAD is a chronic disorder. A twelve-year follow-up study reported that 42 percent of the people diagnosed with GAD did not remit even after 13 years and nearly 50 percent of those who remitted had a recurrence (Bruce et al., 2005). Though it tends to disappear after age 50 for many people, it is usually replaced by somatic symptoms disorder with physical health concerns (Rubio & Lopez-Ibor, 2007). It is a common and a chronic disorder, however, in spite of high levels of worry and perceived low well-being, most of the people with GAD manage their lives though with some role impairment. As compared to panic disorder or major depressive disorder which are more debilitating disorders, people with GAD are less likely to avail the psychological treatment facilities, because they usually visit physicians with physical complains like muscle ache, gastrointestinal problems etc. (Hofmann et al., 2010).

*Gender ratio***:** GAD is twice as common in women as in men (Rickels & Scheweizer, 1997).

General characteristics of people with GAD

- People suffering from GAD live in a relatively constant state of diffuse uneasiness, tension, and worry.
- They are almost always in an anxious apprehension**,** defined as a future oriented mood state in which a person constantly attempts to be ready to deal with any upcoming negative events.
- There is chronic over arousal along with high levels of negative affect, and a sense of uncontrollability (Barlow et al., 1996).
- Decision making is difficult as they have poor concentration and dread to make mistakes.
- They often unsuccessfully attempt to avoid anxiety by procrastinating or indulging in checking activities.
- They are hyper-vigilant for all possible signs of threat in their environment.
- There are frequent complaints of muscle tension and aches in the neck and upper shoulder region.
- Sleep disturbances, such as insomnia, nightmares and sometimes hypersomnia (excessive sleep) to escape from anxiety are often reported.
- Such people feel upset, uneasy, and discouraged due to constant worries.
- Family, finances, work, and personal illness were found to be the most common life areas of worry (Roemen, Molina, & Borkovec, 1997).
- Decision making is difficult for them and they worry endlessly over possible errors that they might have made while deciding.
- Real and imagined mistakes committed currently or in the past are often reviewed after going to bed.
- All the possible future difficulties are anticipated by them.

- They are unable to logically think that it is useless to trouble oneself with future outcomes which are beyond one's control.
- Failure to control their tendency to worry gives them a feeling of helplessness.

Causes of GAD

(1) Biological Perspective

*Genetic Factors:*There is mixed evidence for genetic factors, however, a modest genetic component for GAD has been reported (Hettema, Neale, & Kendler, 2000). Among the research studies carried out so far, one of the largest and most recent twin studies has reported a variance of 15 to 20 percent in liability to GAD due to genetic component. In other words, there is higher concordance rate for GAD in MZ than DZ twins. Further, strong evidence has been found for a common underlying genetic predisposition for GAD and major depressive disorder (MDD) (Kendler et al., 2007). Nevertheless, whether a person with a genetic risk for GAD or MDD will develop the disorder/s is determined by the environmental factors (nonshared environment). A basic personality trait called neuroticism has been conceptualized as the common underlying predisposition for developing GAD and MDD (Kendler et al., 2007).

*Neurochemical and Neurohormonal Factors:*Neurobiological model is based on the research conducted between 1950s and 1970s on the operations of *benzodiazepines*, a group of drugs that are effective in the treatment of anxiety. Researchers discovered a receptor in the brain for benzodiazepines that is linked to the inhibitory neurotransmitter, Gamma Amino Butyric Acid or GABA. In normal fear reactions, neurons throughout the brain fire and create the experience of anxiety. This neural firing also stimulates GABA system, which inhibits this activity and reduces anxiety. GAD may result from some defect in the GABA system so that anxiety is not brought under control. The benzodiazepines may reduce anxiety by enhancing the release of GABA. GABA, serotonin and norepinephrine have been suggested to play a role in anxiety (LeDous, 2002), but their interaction remains largely unknown till date (Butcher et al., 2017).

The Corticotropin Releasing Hormone (CRH): The CRH plays a role in GAD as it is an anxiety producing hormone. When CRH is activated by stress or perceived threat, it stimulates the pituitary gland which in turn releases the adrenocorticotropic hormone (ACTH). The ACTH stimulates the adrenal gland which in turn releases the stress hormone called cortisol. The CRH is believed to play an important role in GAD as it has been discovered to affect the bed nucleus of the extension of amygdala which mediates generalized anxiety (Davis, 2006).

(2) Psychoanalytic Perspective

Generalized anxiety is the result of a constant unconscious struggle between id impulses and ego. Id impulses are aggressive and sexual in nature, and struggle for expression whereas the ego because of its unconscious fear of being punished, does not let id express its desires. Since the source of anxiety is unconscious, person does not know the reason for anxiety and as a result is always anxious and apprehensive. The person cannot evade anxiety

as he/she can not escape from id, for escape from id means that the person is no longer alive. Furthermore, since anxiety is not displaced onto a specific object or situation as it happens in the case of phobia, hence the person is anxious nearly all the time. But due to lack of empirical verification, this viewpoint is not clinically accepted.

Behavioural Perspective

According to Wolpe (1958), the elicitors of anxiety may be environmental factors, e.g., other people or social situations. A person who spends most hours of his/her day with other people may be anxious because of the people or the social situations and not because of any internal factors, i.e., the person learns to associate their anxiety with the presence of other people.

Cognitive-Behavioral Perspective

The main underlying idea is that GAD results from distorted cognitive processes. People with GAD often misperceive benign events, such as crossing the street as involving threats, and their cognitions focus on anticipated future disasters (Beck et al., 1987). Their attention is easily drawn to threatening stimuli (Mogg, Miller, & Bradley, 2000). Studies have shown that in contrast to non-anxious people, generally anxious people tend to notice threat cues when presented with a mixture of threat and non-threat cues (Mineka et al., 1998). Furthermore, they are more inclined to interpret ambiguous stimuli as threatening and to rate ominous events as more likely to occur to them (Butler & Matthews, 1983).The heightened sensitivity to threatening stimuli occurs even when the stimuli cannot be consciously perceived (Bradley et al., 1995).

Uncontrollable and unpredictable aversive events are much more stressful and hence more anxiety provoking than the controllable and predictable events. People with GAD may have a history of experiencing many important life events as unpredictable and uncontrollable (Mineka & Zinbarg, 1998). Early experience with control and mastery can immunize to some extent against the harmful effects of exposure to stressful situations and may in turn immunize against GAD (Barlow et al., 1998).

Borkovec et al. (1998) have proposed another cognitive view as they focused on the various functions served by worry. Worry can be negatively reinforcing; it may serve five positive functions for people with GAD:

- Superstitious avoidance of catastrophe (worrying will lessen the likelihood of a feared event);
- Actual avoidance of catastrophe (worrying helps to generate ways of avoiding catastrophe);
- Avoidance of deeper emotional topics (worrying distracts from more troublesome emotions);
- Coping and preparation; and
- Motivating device (helps in motivating oneself to work).

A subset of people with GAD believe that worry has positive functions, which in turn helps in maintenance of high levels of anxiety (Dugas et al., 2007). Worrying is self-sustaining as it does not produce much emotional arousal, e.g., it does not produce the physiological changes that usually

accompany emotion, and it blocks the processing of emotional stimuli. Despite its positive functions, worry has some negative consequences as well (Newman & Liera, 2011). Worry is not an enjoyable activity as it involves thinking about the negative catastrophic outcomes and can lead to a greater sense of anxiety and danger. According to Wells and Papageorgio (1995), it may lead to more intrusive thoughts as they found in a study that involved three groups watching a gruesome movie in three conditions. After watching the movie, one group was told to relax, the second group was told to imagine the events in the movie and the third group was asked to verbally worry about the movie. It was found that people in the third group had more intrusive thoughts as compared to the other two groups after several days of watching the movie. Worrying also leads to more intense negative emotions (Newman & Libera, 2011). Further, there is evidence for paradoxical effect of worry also, that is, attempts to control worry leads to more intrusive thoughts which lead to a feeling of uncontrollability. This in turn leads to anxiety which further enhances worry. Thus, it leads to a vicious cycle of worry, intrusive thoughts and anxiety (Mineka & Zinbarg, 2006).

Treatment of GAD

Psychological therapy and medication are used as treatment options for GAD.

(1) Cognitive-Behavioral Therapy (CBT): As has been described in the above sections, CBT uses a combination of behavioral techniques such as progressive muscle relaxation exercises (to relieve the physiological symptoms, such as breathlessness, muscle tension) and cognitive techniques, such as cognitive restructuring (for dealing with the psychological symptoms, such as anxiety, cognitive distortions, catastrophizing, etc), (Barlow, Allen, & Basden, 2007). Though, GAD has been known as one of the most difficult among anxiety disorders to treat, nevertheless, research review has found the CBT to successfully alleviate the symptoms of GAD (Mitte, 2005). Interestingly, research has shown CBT to be as effective as benzodiazepines and it has also helped to taper off long usage of medication (Gosselin et al., 2006).

(2) Medications: Often, people suffering from GAD consult general practitioners (GPs) for somatic systems such as muscle aches, tingling sensations, numbness, breathlessness etc. and are prescribed benzodiazepines or anxiolytics, such as alprax, restryl (market names). These drugs lead to symptom relief, and are more effective in alleviation of physiological rather than psychological symptoms. But these drugs can lead to psychological and physiological dependence. Buspirone is a new drug which is more effective in alleviating psychological symptoms like anxiety and does not lead to sleepiness and psychological or physiological dependence but it takes a longer time (2 -4 weeks) to show effect (Roy-Byrne & Cowley, 2007). Similarly, some antidepressants have also proved to be beneficial in treating GAD, but these also take a long time (several weeks) to show their effect (Goodman, 2004).

Self Assessment Questions 3

1. Generalized Anxiety Disorder was earlier described as _____.
2. The psychoanalytic perspective of the occurrence of GAD involves _____.
3. People with generalized anxiety disorder reflect a _____ oriented mood state.
4. According to which perspective, anxious people are generally more inclined to interpret ambiguous stimuli as threatening?

8.7 LET US SUM UP

Let us now list all the major points that we have learned in this Unit.

- Main anxiety disorders identified by DSM-5 are specific phobia, social phobia, panic disorder, and generalized anxiety disorder.
- A phobia is a persistent and disproportionate fear of a specific object or situation that presents little or no actual danger to a person.
- According to DSM-5, Specific phobia, previously known as simple phobia, has five sub types: animals (e.g., snakes, spiders, dogs); natural environment (e.g., water, heights, storms); blood-injection-injury; situational (bridges, tunnels); others (vomiting, choking, 'space phobia' where the person has a fear of falling down if he/she is away from walls or support).
- Phobias develop as a result of psychological, behavioural, biological, evolutionary, or cognitive factors.
- A social phobia is a persistent, irrational fear generally linked to the presence of other people. It can be extremely debilitating.
- The difference between social phobia and social anxiety disorder (SAD) is largely chronological, in that social phobia is the former term and SAD is the current term for the disorder.
- Panic disorders are characterised by panic attack which are a discrete period of intense fear or discomfort, in which at least four from a list of 13 standard symptoms develop abruptly and reach a peak within 10 minutes.
- Panic attacks are experienced across all the anxiety disorders. Cognitive-behaviour therapy and medication is found to be effective in the treatment of panic disorder.
- Generalized Anxiety Disorder is a state of chronic, excessive and unreasonable worry about multiple life events or activities and is caused due to genetic, psychological, chemical, behavioural or cognitive causes.
- The Corticotropin Releasing Hormone plays a role in GAD as it is an anxiety producing hormone.
- CBT uses a combination of behavioral techniques such as progressive muscle relaxation exercises to relieve the physiological symptoms,

such as breathlessness, muscle tension and cognitive techniques, in the treatment of GAD.

8.8 KEY WORDS

Anxiety: Feeling experienced only in anticipation of danger/threat when such a danger/threat is not present or cannot be specified.

Comorbidity: When two or more disorders or illnesses that occur in the same person.

Panic: Subjective feelings of impending doom, fear of dying, going crazy and losing control.

Panic attack: Discrete period of intense fear or discomfort, in which at least four from a list of 13 standard symptoms develop abruptly and reach a peak within 10 minutes.

Gamma Amino Butyric Acid or GABA: Inhibitory neurotransmitter that helps to keep the feeling of anxiety away

Corticotropin Releasing Hormone (CRH): The CRH plays a role in GAD as it is an anxiety producing hormone.

Phobia: A phobia is a persistent and disproportionate fear of a specific object or situation that presents little or no actual danger to a person.

Social phobia: A persistent, irrational fear generally linked to the presence of other people which can be extremely debilitating.

Agoraphobia: A fear of "agora", Greek word for public places of assembly or marketplace. It is a fear of crowded places.

Generalized Anxiety Disorder: A state of chronic, excessive and unreasonable worry about multiple life events or activities.

8.9 ANSWERS TO SELF ASSESSMENT QUESTIONS

Answers to Self Assessment Questions 1

1. Real, anticipated
2. Specific phobia, social phobia, and agoraphobia
3. Flooding
4. virtual reality
5. psychoanalytical

Answers to Self Assessment Questions 2

1. The subtypes of social anxiety disorder include - one is specific to performance situations, e.g., public speaking, and the other is general or in non-performance situations, e.g., eating in public
2. Social skills deficit model
3. Restructuring
4. Marketplace

5. Internal, external
6. cognitive restructuring integrated with exposure therapy

Answers to Self Assessment Questions 3

1. Free floating anxiety
2. Conflict between id impulses and ego
3. Future
4. Cognitive-behavioural

8.10 UNIT END QUESTIONS

1. Define anxiety and give the characteristics of anxiety disorders.
2. Explain modeling as the way to treat phobia.
3. What is the DSM-5 criteria of a panic attack?
4. Discuss the causes of social anxiety disorder.
5. Discuss the treatment of panic disorder.
6. What are the characteristics of social phobia?
7. How does cognitive-behaviour therapy help in the treatment of social phobia?
8. Explain the psychoanalytical perspective for the development of GAD.

8.11 REFERENCES AND SUGGESTED READINGS

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Web Resources:

- Watch the video on ‘ what is social Anxiety Disorder?’ (Health Matters, University of california TV).

  https://m.youtube.com/watch? v = 4truuD_xMPO

- Watch the movie ‘As Good As It Gets’; Directed by James L. Brooks (1997)

UNIT 9: OBSESSIVE COMPULSIVE AND RELATED DISORDERS*

Structure

9.1 LEARNING OBJECTIVES

After studying this Unit, you would be able to,

- *Gain knowledge about obsessive-compulsive and related disorders;*
- *Explain the psychopathology and phenomenology OCD and BDD with the help of case studies;*
- *Discuss the bio-psycho-social causal factors implicated in these disorders;*
- *Elucidate the treatment of OCD and related disorders.*

9.2 INTRODUCTION

One psychiatric disorder, which has probably been extensively studied and has gained immense curiosity is Obsessive Compulsive Disorder (OCD). Ever wanted to wash your hands frequently so that you were clean and tidy? Wanted to keep things neatly arranged in you room and felt annoyed if things were missing from their place? Had doubts whether the bathroom geyser switch was left on after leaving the house? Felt the need to itch and scratch your scalp when feeling tensed? Peeled the skin from your nail cuticles or surrounding areas? Many of us might have experienced or may be doing these things. But when are these reasons enough to be worried and seek professional help to overcome these? In the present Unit, you will be acquainted about obsessive compulsive and its related disorders.

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OCD was earlier considered to be an anxiety disorder, however, DSM-5 (APA, 2003) classifies it under the group called Obsessive Compulsive and Related Disorders (OCRD). OCRD includes a group of disorders, which has compulsiveness as a prominent characteristic feature in their psychopathology, with anxiety having no functional relation to the compulsive symptoms. The disorders that make up OCRD are body dysmorphic disorder, trichotillomania, excoriation and hoarding disorder.

In this Unit you will learn about two important and commonly seen disorders, Obsessive Compulsive Disorder (OCD) and Body Dysmorphic Disorder (BDD).

9.3 OBSESSIVE COMPULSIVE DISORDER (OCD)

Box 9.1: Arun's Story

At 9 years of age, Arun was pursuing his studies in school when started getting repeated, intrusive thoughts of death of family members and would often go and check his parents room to check whether they were alive or not. He would often call them when they were not home and would fear them not being around him. His parents thought this is a normal childhood fear and that he will grow out of this eventually. As he grew older he started getting afraid of looking at figures of God, as he would get abusive words in his mind and thought that he was abusing God. This led to him avoiding going to the temple. He would close his eyes when he would cross the small temple at home and would immediately go to his mother to confirm whether he said something bad about God or not. This started affecting his studies as whenever he would get these thoughts while studying he had to stop reading and had to chant mantras twice to make him feel better. He started becoming overly cautious of not doing anything immoral. He had strongly held superstitious beliefs, which made him, pray for hours sitting alone in his room. He would occasionally go down to play with other children, however, he couldn't find anyone who could relate to his thoughts and felt like the odd one out. While he struggled with these thoughts for years, he only came to seek treatment when he was 22 years old as his studies were suffering immensely. He could not clear his exams on two different occasions because of which he started feeling low, would not get out of his bed for days and would get thoughts of being worthless.

Obsessive compulsive disorder (OCD) involves the presence of unwanted, intrusive and repetitive thoughts, images or urges that are accompanied by compulsive behaviours performed to neutralize the distress associated with obsessions or to prevent some feared situation from happening.

The persistent, repeated and intrusive thoughts of death of his family members, getting abusive words in his mind, thoughts of abusing God are all different types of obsessions that Arun was having. By very nature, obsessions can be of different types and forms (see box 9.2 below), like they can come as thoughts, impulses, images that can be highly distressing to the individual experiencing them. As you saw in Arun's story, his studies started getting affected, he reduced his social interaction as he felt like the "odd one out" and interactions with family were also strained.

Usually, we find that people who experience obsessions try to resist them as it causes considerable disturbance and anxiety to them. In doing so they often tend to engage in behaviours that reduce this distress, these take the form of compulsions. In Arun's case he was constantly trying to see whether his parents were alive or not, chant mantras and he started avoiding going to temple all together. Compulsions, like obsessions, can also be of different types (see box 9.2 below), they can either be overt such as doing an action physically or can be covert such as repeating something in one's mind (words, numbers, sentences etc) that reduces their distress momentarily. While there is a sense of relief from the distress or feared consequence after performing these compulsions, they can take the form of rigid rules in which the person feels compelled to perform them which further increases their distress.

Box 9.2: Different Types of Obsessions and Compulsions

Obsessions	Compulsions
• Contamination	• Cleaning/Washing
• Aggressive	• Checking
• Sexual	• Repeating Rituals
• Hoarding/Saving	• Ordering/Arranging
• Religion	• Counting
• Symmetry	• Hoarding/Collecting
• Somatic	• Miscellaneous
• Miscellaneous	

A patient with OCD possibly knows that both the obsession and the compulsion are irrational, hence we call them as *ego-dystonic* or something which is unwanted. OCD has a heterogenous presentation among those diagnosed, characterized by various presentations of obsessions. It has been found that obsessions related to contamination are present in about more than half of the people diagnosed with OCD and is considered one of the most disabling among other presentations of obsessions.

Along with the above mentioned features, the diagnostic criterion for OCD in DSM-5 mentions that, the obsessions and/or compulsions must be time consuming (at least an hour per day) and/or cause significant disruption of one's socio-occupational functioning. An important aspect of the criteria is the insight level of the patient which may be either good or satisfactory, poor, or one where the patient has no insight/delusional convictions (the patient thinks with utmost certainty that his/her beliefs related to OCD are entirely true). Having poor or no insight can lead to a poor prognosis as well as impact a person's motivation in treatment. Furthermore, the criteria also emphasize on investigating whether the person has a present or past history of tic disorder.

Prevalence, Age of Onset, and Gender Differences

The lifetime prevalence of OCD worldwide is estimated to be around 1.5% for women and around 1% for men. Estimations among adults in USA are slightly higher, being 2.3% (Fawcett, Power, & Fawcett, 2020; Ruscio, Stein,

Chiu, & Kessler, 2010). In India the estimate is around 0.8% for adolescents (Jaisoorya, Reddy, Thennarasu, Beena & Jose, 2015) and between 0.5% to 3% in adults (Gururaj et al., 2016). Within India early age of onset of OCD has been linked with the presence of sexual obsessions, hoarding, repeating rituals and compulsions involving need to touch (Narayanaswamy et al., 2012; Rajashekharaiah & Verma, 2016).

Worldwide females have been found to have OCD at slightly higher rates than males in adulthood, although males are more commonly affected in childhood. Furthermore younger adults may be more likely to experience OCD in their lifetime than older adults (Fawcett et al., 2020). What makes studying about OCD even important is that this is the fourth most common psychiatric disorder in the world, with disability associated with severe cases often comparable to the disability associated with schizophrenia and bipolar disorder (Reddy et al., 2010).

Co-morbidity

Depression and anxiety disorders (panic, generalized anxiety disorder and social phobia) are the most common co-morbid with patients seeking treatment for OCD. Other common co-morbid disorders include bipolar disorder, tic disorders, body dysmorphic disorder, trichotillomania, hypochondriasis and skin picking disorder. Attention Deficit Hyperactivity Disorder (ADHD) and Oppositional Defiant Disorder (ODD) are highly co-morbid in patients with early onset OCD, especially when the onset is in childhood. Nearly a third of schizophrenia patients report OC symptoms or OCD. Personality disorders such as obsessivecompulsive, anxiousavoidant, schizotypal and borderline personality disorder are also relatively commonly co-morbid with this illness (Reddy, Sundar, Narayanaswamy, & Math, 2017).

Self-Assessment Questions 1

1. Obsessions can take the form of images. True/ False.
2. The onset of OCD mostly is in late adulthood. True/ False.
3. Depression is a common co-morbid condition accompanying OCD. True/ False
4. _____ is a form of overt compulsion.
5. Compulsive behaviours are performed with the goal of _____.

9.3.1 Etiology of Obsessive Compulsive Disorder

Genetics: Family and twin studies have shown that genetic factors are reasonably involved in OCD. They have indicated that not only one but a number of vulnerability genes are involved in the transmission of OCD from one family member to another (Cavallini, Pasquale, Bellodi, & Smeraldi, 1999; Nicolini, Kuthy, Hernandez, & Velazquez, 1991). Interestingly, the family members of patients with OCD having higher number of obsessions related to checking, symmetry or ordering, were seen to be at a greater risk of developing OCD themselves, than were relatives of patients with OCD who had low scores on these obsession domains (Hanna, Fischer, Chadha, Himle, & Van Etten, 2005).

Neurobiological Mechanisms: The orbito-frontal system of our brain connected to the thalamic area, mediated by a neurotransmitter called glutamic acid is implicated in OCD. While a second loop, connects the same system via the corpus striatum which controls the amount of activity within the systems. When this system fails to balance out the over activity in the orbito-frontal–thalamic loop, an individual keeps repeatedly responding to his or her environment. This leads to the development of OCD. The neurotransmitters implicated in this system include serotonin, dopamine and GABA.

Psychodynamic Models: Freud viewed the development of OCD as a result of fixation at and regression to the anal-sadistic stage of development. He proposed that this fixation and regression was a possible consequence of strict toilet-training in infancy. This behavior had elements of aggression, and exercise of control over others associated to it. Thus, he called these patients as having an anal type character represented by traits such as parsimony, obstinacy, and orderliness. The anal character could then take on an anal-retentive personality type, manifested as psychological rigidity as well as an excessive need for control or it could also take the form of an anal-expulsive personality type.

Karl Abraham (1923) extended his work by proposing that in the anal stage, one phase has retention as the dominant theme, which becomes the source of enjoyment, and another phase where sadistic urges towards others take dominance and the pleasure is received from emptying one's bowels. Three ego defense mechanisms usually seen at play in OCD are isolation of affect, undoing (in the form of compulsions), and reaction formation.

Another psychoanalytic theory conceptualized OCD as a conflict between the ego and superego as well as that between aggressive, sexual impulses emerging from the id (Fenichel, 1945). Thus, the repeatedly occurring obsessions were primarily seen as an expression of unacceptable aggressive or erotic impulses as well as may be a punishment received by the ever so strong and harsh superego.

Adler (1964) tried to further these conceptualisations and put forth his understanding of OCD resulting from the person's failure of feeling in control of his or her life situations. He understood compulsions being unconscious attempts of a person to compensate for this lack of control.

Behavioural Models: To understand the behavioural model of OCD, it is important to appreciate the *Mowrer's two-stage model of fear* and avoidance (Mowrer, 1947). This model is one of the most important in understanding the behavioural development and maintenance of OCD. Mowrer proposed that fear of stimuli (such as thoughts, images or even objects) can be acquired through the classical conditioning process. There are two stages to his model where in the first stage, neutral stimuli can become conditioned stimuli through pairing with another unconditioned stimulus (one that naturally predicts the fear response). An example of this can be a person getting contamination obsessions after being seriously ill or experiences of a family member being diagnosed and suffering from a serious illness. Another example can be a person having obsessions related doubt after experiencing an accident at home due to fire/current etc.

The second stage of the model explains fear maintenance. He believed this happens through operant conditioning processes, i.e. behaviours related to escape and avoidance. Compulsions, according to this theory thus can be seen as active avoidance behaviours that are negatively reinforced. They thus become habitual over time as they are successful in decreasing the fear and distress caused by the obsessions. The reinforced behaviours (in OCD compulsions) thus become difficult for extinction (Dollard & Miller, 1950). Taking forward the example of a person with contamination obsessions, he or she may engage in excessive hand washing, taking long showers or even avoiding public washrooms or not going near people who are sick so that the chance of contamination can be minimised as much as possible.

The theory further proposes that other operant conditioning factors that maintain OCD are called as safety behaviours, e.g., a person with contamination related OCD using a cloth to open a restroom door. These are negatively reinforced as they help in avoiding and escaping from the anxiety momentarily, however, are seen as important factors that help maintain or even exacerbate the OCD related symptoms (Deacon & Maack, 2008; Salkovskis, 1991).

Cognitive Models:

Salkovskis' Cognitive-Behavioral Theory: In 1985, Salkovskis proposed the appraisals of intrusive thoughts (especially those linked to responsibility) and not just thoughts themselves as an important cause of compulsions. The theory suggests that people with OCD view normal intrusive thoughts; urges or images signifying some harm to himself/herself or another and thus impose a serious threat. People with OCD also tend to appraise themselves being responsible for the perceived harm, which possibly only they can prevent (Salkovskis, 1985). This compels them to perform behaviours to reduce the harm whenever they experience intrusive thoughts/obsessions.

Rachman's Theory: Rachman took the previous theory forward and proposed the presence of two cognitive biases, which increase the likelihood catastrophic misinterpretations ("some harm will happen to me or my family and I must prevent it") of obsessive beliefs. The first bias is a belief that thinking about an unpleasant situation will make it more likely for it to occur in reality. For example, "If I get a thought about my mom being in an accident means she has gotten/or will for sure get into an accident", whether or not that is true in reality. The second bias is more deeply rooted in morality. It says that having an immoral thought is equivalent to immoral actions (e.g. 'If I get a bad thought, I am a bad person'). Hence with Rachman's theory, the phenomenon of thought-action fusion came to life (Rachman, 1998). This will be discussed in detail later on in this unit. According to Rachman's theory, the compulsions are maintained because the person assumes a heightened sense of responsibility to prevent harm. The heightened sense of responsibility is influenced by the above said biases in thinking. The individual is in constant doubt about whether the harm has been reduced or not. Thus, to remove this doubt the individual constantly engages in the compulsive act to make sure the harm has been reduced. This phenomenon can especially be seen in people who have compulsions related to checking.

Obsessive Compulsive Cognitions Working Group model: A group of researchers, called the Obsessive Compulsive Cognitions Working Group (OCCWG) first met each other at the world congress of behavioural and cognitive therapies, Demark (1995). They collaboratively came to understand OCD on the basis of three aspects, intrusions (thoughts, images, urges), appraisals (which are the interpretations one gives to the intrusions) and finally assumptions or beliefs about the appraisals. They identified six major belief domains implicated in OCD (OCCWG, 1997) These are, having an *inflated sense of responsibility* ("I am responsible to prevent harm at any cost"), belief that all thoughts are of importance (*over importance of thoughts*)**,** *overestimation of threat* (any situation can be or become dangerous), *importance of controlling thoughts* ("it is important for me to control my thoughts, urges, impulses"), *intolerance of uncertainty* ("if I don't know what is happening some harm is likely to befall") and *perfectionism* ("There is a perfect way to solve all problems and I must be perfect in doing that or else something bad will happen/I am not capable enough to shoulder my responsibility").

Metacognitive Model (Wells & Mathews, 1997): The metacognitive model of OCD (Wells, 1997) proposed that metacognitive beliefs about intrusive thoughts lead to maladaptive thinking, which they coined as the Cognitive Attentional Syndrome (CAS). CAS consists of rumination, worry, monitoring of threat, as well as overt and covert compulsive rituals. All these are different ways of dealing with the distress associated with obsessions. Two domains of metacognitive beliefs proposed were of beliefs related to the importance of intrusive thoughts/feelings along with how dangerous these can be if not addressed, along with beliefs related to a need to perform compulsions. The first belief domain also called as *fusion beliefs*, include three important beliefs, these are: *thought-event fusion* (presence of a thought can cause events to happen/ belief that event has already happened); *thought-action fusion* (presence of thoughts can make a person engage in unwanted actions) and *thought-object fusion* (presence of thoughts/feelings can be transferred into objects). The second belief domain consists of beliefs about rituals specifically. These are most often expressed in the form of declarative statements (e.g., "I should/must clean my hands till I stop thinking about germs/dirt") or can be seen as one preparing a plan to monitor their actions better.

Self Assessment Questions 2

1. According to Salkovskis how do individuals appraise obsessive thoughts?
2. Name the belief domains identified by the OCCWG.
3. What are three types of meta cognitive beliefs?
4. The concept of thought action fusion was first proposed by _____.

Family Involvement in OCD

OCD can lead to many interruptions in daily functioning causing distress to the entire family. Family accommodation in OCD refers to the changes that family members get in their own behavours in order to help reduce the distress of the person suffering from OCD. These behaviours are also

aimed at helping the person reduce the time taken in prolonged compulsive rituals. Family members have been seen doing the rituals as instructed by the patient (e.g., patient may ask them to check the light switches, stove etc) (these are also called as proxy compulsions). They may even sometimes get cleaning supplies such as soaps or detergents of particular brands to meet the demands of patients, choose timings of using washrooms according to the patient's needs, or even provide reassurance through verbal statements to make the patient feel at ease. While sometimes the family members themselves make these accommodations, at times patients demand such behaviors and can become aggressive or upset when these demands are not met. In the longer run, however, these are not helpful as patients continue to avoid confronting their obsessions and don't learn to tolerate the distress associated with them. This strengthens their obsessions and the OCD cycle is maintained. Higher levels of family involvement has been associated with increased OCD symptoms as well as poor functional and treatment outcomes (Foa & Kozak,1996).

9.3.2 Treatment of Obsessive Compulsive Disorder

Cognitive Behavioural Therapy (CBT): Behaviour Therapy (BT) and CBT is often seen as the first line and important treatment in the management of OCD (Krzyszkowiak, Kuleta-Krzyszkowiak, & Krzanowska, 2019). The therapy focuses on Exposure and Response Prevention (ERP) as well as challenging the idiosyncratic beliefs held by patients related to their obsessions and compulsions (some of which have been mentioned in the cognitive perspective above).

In ERP sessions, the patients are encouraged to gradually face the anxiety provoking situations while preventing them from doing any compulsions/ rituals that can neutralize the anxiety. This is done by collaboratively making hierarchies of feared situations, rated on the basis of the distress it causes them (termed as Subjective Units of Distress or SUDs). The therapy also makes use of behavioural experiments to help patients disconfirm their beliefs and expected consequences of harm. The sessions can range from 13-20 sessions held weekly/bi-weekly, with 3-6 booster sessions offered every month.

Medication: studies have shown that selective-serotonin reuptake inhibitors (SSRIs) are effective in management of anxiety in the treatment of OCD. Other medications often considered in the treatment are serotoninergic tricyclic antidepressants such as clomipramine (Reddy et al., 2017).

9.4 BODY DYSMORPHIC DISORDER

Ever looked in the mirror and thought, "my forehead is so long", "My nose is so crooked", "my pimples are ugly", "My eyes are terribly huge/ small", "my teeth are protruding out", "what terrible hair", "I wish I looked prettier"?

Well, we all have done this sometime or the other. Many of us do not feel good about how we look and hope to better/change our appearance. However, how many times would you have engaged in such a behavior? Now imagine someone engaging in such behaviours and engulfed in such thoughts 24*7. Will that be distressing?

Let us see what happened with Anisha (box 9.3) to understand better.

Box 9.3: Anisha's Story

19-year old Anisha, an undergraduate student came to the hospital after a suicide attempt. Upon talking to her it was found that she was obsessively preoccupied with how she looked. For years she referred herself as the "ugliest duckling of the lot". When she was 15 years old, she had developed acne, which was highly distressing for her. From then onwards she experienced disturbed sleep, felt irritable and low whenever there was a break out of pimples. She would keep thinking, "If I touch my face and burst the pimples, they will grow back worse and leave scars on my face. I cannot deal with my acne." She said that her face was ugly and the pores on her skin are overly enlarged. She spends five to seven hours per day checking her skin in front of the mirror or by opening her front camera on the phone. She further sometimes washes her face 6-7 times daily. She believes that, "If I clean my face every hour and keep my skin clean, the pores will become smaller", "I need to keep on checking my acne otherwise I will not be able to manage the situation from getting worse". Several times she has scheduled dermatological consultations to ask the doctor for skin peels and medication. She further consulted the doctor for a cosmetic surgery, but was told that she did not need that. However, she continued to believe that her acne was terrible and the skin pores were enlarged. She feared others would make fun of her just like they did in school. She became socially withdrawn as she thought "It's better to be by myself than go out with others making fun of me", "If I go out I will anyway not have a good time so what's the point". She would often feel restless in public places as she believed that others were making fun of her appearance. After overdosing on her acne medication in despair about her condition, her family members brought her to the hospital. She further reported that the doctors were not helping her with further medication and facial peels which made her think that there is no solution left for her acne. She felt hopeless and worthless which led to the suicidal attempt.

An Italian psychiatrist by name of Enrico Morselli was the first to talk about dysmorphophobia in 1891. He believed that this condition is a "subjective feeling of ugliness or physical defect which the patient feels is noticeable to others, although the appearance is within normal limits. The dysmorphophobic patient is really miserable; in the middle of his daily routines, everywhere and at any time, he is caught by the doubt of deformity."

The current conceptualization of Body Dysmorphic Disorder (BDD) is in line with what he mentioned and includes a preoccupation with appearance, being excessively self-conscious including disproportionate concerns about minor flaws as well as excessive and repetitive anxiety-provoking thoughts about their imagined defects. Patients with BDD often find themselves engaging in repeated mirror checking, comparing their appearance with others, overly engaging in grooming themselves and can also resort to skin picking when feeling distressed. They may seek reassurance from their family or close friends which can maintain this cycle of preoccupation with their looks. You may often find patients dealing with these difficulties first

seeking help from dermatologists and plastic surgeons rather than mental health professionals.

DSM-5 (APA, 2013) also mentions that this preoccupation with appearance must not be better explained by them having concerns about body fat/weight and should not amount to an eating disorder. It also requires investigations to be made for muscle dysmorphia as well as establishing the insight levels as being good, fair, poor as well as absent insight with or without delusional beliefs.

To understand the phenomenology of BDD let us look at some important key elements of the disorder:

- **Body image:** An individual's subjective sense of body image majorly influences their overall quality of life as compared to the objective 'reality' of their appearance. Patients with BDD feel extremely handicapped even though objectively they appear to have a 'normal' appearance for others. This discrepancy between their perceived body image and the true reality leads to stigma experienced by them.
- **Body image valence**: This refers to how satisfied or dissatisfied one is with their body image. While some people may not like certain attributes in their body, they may not value their overall appearance as much as other aspects such as family, relationships, career etc. For people with BDD a high level of valence is placed on body image whether they not only have former but also negatively evaluate their body image.
- **Overvalued ideas and Delusions:** People with BDD have extreme values related to importance of appearance which significantly impacts their self- concept. However, they are ignorant to the consequences that come along with it. Other than appearance, some people also tend to place symmetry or perfectionism as highly important, whereas others value being socially accepted which they think will happen only if they have a 'normal' appearance. These overvalued ideas and beliefs can sometimes take the form of rigid, unshakable beliefs and turn to delusions.
- **Metacognitions and Ruminations:** Rumination for people with BDD can take the form of mental imagery and thoughts about being defective, ugly, thinking about the "why's" (why am I so ugly?", "why did my nose have to be so imperfect?"), the "what's and what if's" ("what will I do if my acne doesn't get better?", "What if I never look better?"), self-punishing thoughts ("you deserve to be laughed upon as you are so ugly") reviewing past experiences as well as worrying about the past and future which further leads to anxiety.
- **Shame, Social anxiety and Perfectionism:** Body shaming, an integral phenomenon in BDD can take on a social/external evaluative form (someone thinking they are inferior, bad or ugly), internal form (being critical and nagging/punishing oneself), emotional form (evoking feelings of self-disgust, hate, anger and humiliation) and a behavioural form (avoidance of people and places, trying to meet others standards). The fear of being negatively evaluated is often

present in people with BDD, thus it is not uncommon for them to report symptoms of social anxiety disorder. People with BDD have further been found to have perfectionistic standards of appearance and behavior and are highly critical and harsh in evaluating themselves.

- **Safety seeking behaviours and Compulsions:** Safety seeking behaviours are any attempts at reducing harm or a perceived catastrophic event. People with BDD often find themselves engaging in safety behaviours such as camouflaging, mirror checking, avoidance or distracting the attention from specific disliked features of the body, verifying features directly, using one's phone or the mirror, comparisons with others as well as reassurance seeking.

Prevalence, Age of Onset, and Gender Differences

The prevalence in USA has been estimated to be around 1-2% in the general population. BDD seems to be more frequent among patients seeking cosmetic treatments with 6-15% of the patients being diagnosed with dermatologic conditions. Prevalence of BDD in dermatological and plastic surgery patients have been reported to be 8%–15% (Phillips, Dufresne Jr, Wilkel, & Vittorio, 2000) and 3%–53% (Aouizerate et al., 2003) respectively. BDD is a chronic disorder, with an average duration of 15.7 years (Phillips & Diaz, 1997). Milder symptoms however may be episodic and aggravate during stressful periods. Furthermore, family history data suggest that 6–10% of first- degree family members have BDD (Richter et al., 2004).

The mean age of onset for BDD is in adolescence (as in the case of OCD), with community studies indicating a higher prevalence of females with BDD (Sadock, 2015). Family and twin study data provide preliminary evidence for genetic susceptibility. Studies also reveal that males are more likely to be preoccupied with small body build, small penis size, thinning hair etc. while females could be preoccupied with their weight, breasts, hips and excessive body hair. Women have also been found to perform more repetitive and safety behaviors, are more likely to camouflage their appearance using techniques like mirror- checking, changing their clothes, picking their skin as well as having an eating disorder. Studies with BDD patients show an equal sex incidence in people whether they are single or separated. Commonly seen in adolescents and young adults, this disorder is rarely seen among the elderly (Veale & Neziroglu, 2010).

Comorbidity

BDD is often under reported or under diagnosed due to shame associated with the disorder. When patients with BDD do seek help they often presented with co-morbid conditions such as major depressive disorder, social phobia, obsessive-compulsive disorder, and substance abuse disorders (Gunstad & Phillips, 2003).

Self-Assessment Questions 3

1. Compulsive behavior is a phenomenon not seen in BDD. True/ False
2. People with BDD can have delusional beliefs. True/ False
3. Males have a higher prevalence rate in BDD as compared to females. True/ False
4. Camouflaging one's perceived flaws shown by people with BDD is an example of _____ behavior.
5. What are the different ways in which shame can manifest in BDD?

9.4.1 Etiology and Treatment of Body Dysmorphic Disorder

Etiology:

Neurobiological model: Neuroanatomical structures of the limbic system including amygdala and insula are implicated in BDD. It has been found that lesions in somatosensory cortex led to loss of perception, while those of the right temporal lobe are responsible for one experiencing deficits in their visual field, experiencing mood alterations and can lead to disorders related to body image. Lesions in the parietal lobe have further been found to have links for development of BDD (Yaryura-Tobias, Neziroglu, & Torres-Gallegos, 2002).Abnormalities in serotonergic responses lead to exaggerated inhibitory response in the fronto-striatal circuits. This is a neurotransmitter circuit which is involved in reducing anxiety. The changes seen in the serotonergic system thus may not be involved in someone developing BDD directly but can result as the system becomes overloaded as one's anxiety increases. Hence SRI's may be involved in the management of this condition.

Behavioural model: Positive reinforcement of experiences with situations involving one's appearance has been found to play an important role in the development of BDD (Neziroglu, 2004). Especially when these are encountered early in life, a child may start believing that appearance is of ultimate importance. Negative experiences further have shown to have an impact on BDD. Instances of trauma linked to sexual and emotional abuse, skin conditions like acne/ psoriasis, teasing, neglect, bullying, etc can result in the person giving over importance to appearance, to the point of creating distress. Vicarious learning happens when people see others being reinforced on the basis of their appearance. This can especially be seen by the influence of television advertisements of beauty products, beauty pageants or movie actors advocating specific looks via their body type, clothes etc.

Cognitive model: The cognitive model of BDD places importance on a phenomenon where people start seeing the self as an aesthetic object (Veale, 2002). Seeing oneself in a mirror can often act as a trigger, which is then described as a self-perceived representation of a person's appearance than their true self. Internal triggers include somatic sensations (feeling puffy under the eyes, tingling sensation in acne prone areas) as well as intrusive thought ("Why is my nose so crooked?)". This makes an individual engage in self – focused attention where he/she becomes excessively aware of one's

body image but from an observer's perspective. The main components of the self as an aesthetic object are:

- **Mental imagery**- This is an impression or representation of how they think they appear to others. It can be negative, recurrent, and vivid where the perceived distorted and the defective features are severely highlighted.
- **Self - focused attention/ cognitive fusion**- An individual with BDD may compare his/her appearance with others. When someone close is perceived to be more attractive, the person may switch into a defensive mode. This will lead to activation of safety seeking behavior, which protects the individual. He/she may also attempt to escape from the situation or camouflage themselves/ or their defects and avoid any perceived threat (e.g., keeping the head down, covering face with some hair or scarf, avoiding eye contact, wearing excessive makeup etc.).
- **Lack of a self-serving bias**- People with BDD may choose to attend to only those features that they consider to be defective which leads to an experience of self-depreciation of their appearance.

Each of these components lead to one believing that they are nothing more than an aesthetic object, eventually raising questions about their body image and self-concept.

Treatment:

Cognitive behavior therapy (CBT) for BDD: CBT for BDD and has been shown to be effective for adults. The treatment is focused on trying to understand the patient's assigned valence to his/her body image, their self-appraisals of situations, cognitive biases, safety behavior and avoidance, which may be maintaining the condition. CBT for BDD uses techniques such as imagery re-scripting, modifying beliefs and appraisals, working through attention biases, graded exposure tasks as well behavioural activation (in cases of depression co-morbid with BDD) in the treatment of BDD.

Medication for BDD: In milder cases of BDD, medication may not be the first line of treatment. However, if the BDD symptoms worsen or have been maintained for long enough, then pharmacotherapy may be recommended. Anti-depressant medication (serotonergic reuptake inhibitor) is often used in treating moderate to severe BDD.

Self-Assessment Questions 4

1. Serotonergic system is not implicated in the development of BDD. True/False
2. _____ reinforcement of appearances in childhood can lead to development of BDD.
3. Lesions in _____ are responsible for loss of perception and are implicated in body image disorders.
4. According to the cognitive perspective, a person with BDD starts viewing him or herself as a _____ object.
5. A phenomenon seen in people with BDD, which makes them attend to their perceived flaws excessively, is called _____.

9.5 LET US SUM UP

- ORCDs include OCD, BDD, trichotillomania, hoarding disorder and excoriation
- Obsessions are repetitive, persistent, intrusive thoughts, images, or impulses that are distressing, inappropriate, and ego dystonic.
- Compulsions are overt and covert repetitive behaviours that are performed as lengthy rituals that help neutralise anxiety.
- OCD is the fourth commonest mental disorder with disability in severe cases, with age of onset in adolescents and a worldwide lifetime prevalence rate of 1.5% for women and 1% for men.
- The orbito-frontal–thalamic loop along with neurotransmitters serotonin, dopamine and GABA are primarily implicated in development of OCD.
- Psychoanalytic view sees development of OCD as a result of fixation at and regression to the anal-sadistic stage of development. It proposes two personality types, namely anal retentive and anal expulsive personality. It also views OCD developing from a conflict between the ego, superego as well as aggressive and sexual impulses emerging from the id.
- The behavioural perspective on OCD has focused on the Mowrer's two-stage model of fear and avoidance behaviour.
- In the cognitive perspective, Salkovskis proposed phenomenon of appraisals of intrusive thoughts (responsibility related appraisals), Rachman proposed cognitive biases lead to catastrophic misinterpretations of intrusive experiences, the OCCWG proposed six major belief domains in OCD, and the metacognitive view proposed importance of metacognitive beliefs.
- BDD involves a preoccupation of a person with appearance, being excessively self-conscious including disproportionate concerns about minor flaws as well as excessive and recurrent, anxiety-provoking thoughts about an entirely imagined defect.
- Key elements identified in the phenomenology of BDD are: body image, body image valence, overvalued ideas and delusions, ruminations and meta-cognitions, shame, social anxiety and perfectionism, safety seeking behaviours and compulsions.
- The mean age of onset for BDD is in adolescence, it seems to be more frequent among patients seeking cosmetic treatments and in patients diagnosed with dermatologic conditions.
- The serotonergic system is not implicated in the development of BDD but could be the result of overloaded systems associated with BDD.
- Behavioural models view positive reinforcement of experiences with physical appearance to play an important role in the development of BDD. Instances of trauma linked to sexual and emotional abuse, skin conditions like acne/ psoriasis, teasing, neglect, bullying etc, as well as vicarious learning can have a significant impact on development of BDD.

- The cognitive model of BDD emphasizes on the experience of the self as an aesthetic object with its main components being mental imagery, self - focused attention/ cognitive fusion, self-focused attention and lack of a self-serving bias.
- While therapy, especially CBT appears to be the first line treatment in both disorders, SSRI's are also usually considered in treatment of moderate to severe conditions.

9.6 KEY WORDS

Obsessive compulsive disorder (OCD): involves the presence of unwanted, intrusive and repetitive thoughts, images or urges that are accompanied by compulsive behaviours performed to neutralize the distress associated with obsessions or to prevent some feared situation from happening.

Cognitive attentional Syndrome: consists of rumination, worry, monitoring of threat, as well as overt and covert compulsive rituals.

Thought-action fusion: presence of thoughts can make a person engage in unwanted actions.

Body Dysmorphic Disorder (BDD): includes a preoccupation with appearance, being excessively self-conscious including disproportionate concerns about minor flaws as well as excessive and repetitive anxiety-provoking thoughts about their imagined defects.

9.7 ANSWERS TO SELF ASSESSMENT QUESTIONS

Answers to Self Assessment Questions 1

1. True
2. False
3. True
4. Mental compulsions
5. Reducing anxiety or feared consequences.

Answers to Self-Assessment Questions 2

1. Individuals appraise obsessive thoughts as harm to themselves or others being a serious risk, and the individual being responsible for the harm.
2. Inflated responsibility, over importance of thoughts, importance of controlling thoughts, overestimation of threat, intolerance of uncertainty, perfectionism
3. Thought-event fusion, thought-action fusion and thought-object fusion
4. Rachman

Answers to Self-Assessment Questions 3

1. False
2. True

3. False
4. Safety seeking
5. Social/external evaluative form, internal form (criticism), emotional form (disgust, anger, humiliation) behavioural form (avoidance)

Answers to Self-Assessment Questions 4

1. True
2. Positive
3. Right temporal lobe
4. Aesthetic object
5. Self-focused attention

9.8 UNIT END QUESTIONS

1. Describe the clinical features, prevalence, age of onset, and gender differences in obsessive compulsive disorder.
2. Discuss the cognitive models explaining the etiology of OCD.
3. Explain the key elements of body dysmorphic disorder.
4. Discuss the etiology and treatment of body dysmorphic disorder.

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UNIT 10: DISSOCIATIVE DISORDERS AND SOMATIC SYMPTOM DISORDERS*

Structure

10.1 LEARNING OBJECTIVES

After studying this Unit, you would be able to,

- *know the classification and symptoms of dissociative disorders and somatic symptom disorders;*
- *explain the psychopathology and phenomenology of dissociative disorders and somatic symptom disorders;*
- *discuss the bio-psycho-social aetiological factors implicated in dissociative disorders and somatic symptom disorders; and*
- *elucidate the treatment of dissociative disorders and somatic symptom disorders.*

10.2 INTRODUCTION

Have you ever felt as if you are dreaming, feeling "detached" from yourself or the things around you are "unreal"? Most people have such

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experiences occasionally and may feel detachment or alterations in their consciousness or identity. While such dissociative experiences are normal, they are extremely intense and disorienting to a few. They may suffer a loss of memory, their sense of reality or even their identity and may adopt a new one. These severe disturbances that can lead to functional impairments are termed as dissociative disorders.

We may all occasionally wonder if we are unwell and take questions about our health to doctors but some individuals may be preoccupied with their health or body to an excessive or maladaptive extent that their life is dominated by it. Such conditions are classified as somatic symptoms and related disorders and have the common thread of excessive response to physical symptoms or related health concerns. In this unit, we will learn about the various conditions that are classified under these two categories; their presentation, causal factors or mechanisms and treatment.

Historically, these two diagnostic categories have been strongly linked as they were found to have common features and were initially clubbed under the term "hysterical neurosis" or "hysteria". These conditions were often presented with unusual phenomena that did not have a medical explanation and theorists sought to explain them otherwise. The term hysteria is associated with early ideas that these disorders were the result of a "wandering uterus" or due to dramatic and "histrionic" behaviours that were considered typical of women. This terminology is no longer in use as it conveys prejudice and a stigmatizing attitude.

10.3 DISSOCIATIVE DISORDERS

Dissociative experiences, where one feels detached from themselves or their environment, were found likely to occur in response to extremely stressful, traumatic events (Spiegel, 2010). Such experiences of unreality are a psychological mechanism and need not be pathological at all times. Pathological phenomenon of dissociation may be characterised by (a) subjective loss of continuity in experiences or memory due to unwanted intrusions, (b) gaps in memory, sense of identity or consciousness due to lack of accessibility/control of information or mental functions, and/or (c) Experiences of distorted perception of oneself or the environment in a disconnected manner (Cardeña and Carlson, 2011). These experiences can be classified into two types – *depersonalization* and *derealisation*. A loss of one's sense of themselves where they feel as if watching themselves and their reactions from outside is defined as depersonalization. Episodes of derealisation are characterised by changes in the reality of the world around us, where objects may appear to be in different sizes or even people may appear changed. These episodes can contribute to serious disturbance in perceptions of reality, memory and even their sense of identity.

DSM 5 lists three major dissociative disorders. The following section describes their clinical features and aims to describe the causative factors and possible treatments.

10.3.1 Clinical Descriptions

- **Depersonalization-Derealisation Disorder**

Box 10.1: Case study- Depersonalization-derealisation disorder

Rahul, a 42-year-old man, walked in for a psychiatric consultation, appearing thin and tired. He reported that he has been almost constantly feeling "spaced out" for the past 20 years. When asked to describe what he meant, he said, "One day I was walking on the road and I suddenly felt as if I was looking down at myself from a balcony. Since then, I have had many such episodes and I never feel like I am completely back in my body". He was extremely afraid of his experience. He spends most of his days at home and has been unsuccessful at holding any job as he had multiple episodes or spent time worrying about his condition. He also had difficulties in his marriage as his wife was tired of dealing with his complaints about feeling "spaced out". He had sought treatment multiple times in the past but felt that medications helped only a little. He was reluctant to try any new medication as he was fearful of any consequences.

Chronic and distressing experiences of unreality that interfere with normal functioning are diagnosed as depersonalization-derealisation disorder as described in the case of Rahul (Box 10.1). This is a relatively rare independent syndrome as depersonalization and derealisation episodes are experienced by people with a number of other psychiatric conditions such as posttraumatic stress disorder borderline personality disorder, somatic symptom disorder, substance-related disorders, schizophrenia and anxiety disorders (Lyssenko et al., 2018). This essentially means that the individual's dissociative symptoms should not be better explained by another diagnosis as indicated in the DSM 5 (Box 10.2). This disorder was found to be affecting men and women equally with 16 years being the mean age of onset. The onset of the condition tends to be sudden with a predominantly chronic course (Simeon et al., 2003).

Box 10.2: DSM 5 diagnostic criteria for depersonalization-derealization disorder (APA, 2013)

A. The presence of persistent or recurrent experiences of depersonalization, derealization, or both:
   - Depersonalization: Experiences of unreality, detachment, or being an outside observer with respect to one's thoughts, feelings, sensations, body or actions (e.g., perceptual alterations, distorted sense of time, unreal or absent self, emotional and/or physical numbing).
   - Derealization: Experiences of unreality or detachment with respect to surroundings (e.g., individuals or objects are experienced as unreal, dreamlike, foggy, lifeless, or visually distorted).

B. During the depersonalization or derealization experience, reality testing remains intact.

C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, medication) or another medical condition (e.g., seizures).

E.	The disturbance is not better explained by another mental disorder, such as schizophrenia or panic disorder.

- **Dissociative Amnesia**

In this condition, the individual is unable to recall important personal information, resulting in a pattern of amnesia that cannot be otherwise explained as a medical condition or ordinary forgetfulness. Dissociative amnesia may leave a person unable to remember anything about themselves and this pattern is described as *generalized amnesia*. This may be circumscribed to a specific period of the person's life such as the last 6 months or a year. More commonly, the pattern is localised to a particular event or experience. In most cases it is observed that the forgotten material is often associated with significant trauma or stress that is unprocessed such as abuse, witnessing violence etc. It can also be restricted to specific aspects of a traumatic experience that are selectively forgotten. Information related to a particular theme that is stressful for the individual may be forgotten in *systematized amnesia*, for instance, meeting a particular person. It is important that these symptoms lead to significant levels of distress or disturbance in their ability to function adequately in different realms of life such as occupation or interpersonal interactions. It is also required to have these symptoms independent of other related diagnoses such as PTSD or neurological conditions such as head injury.

A variation of dissociative amnesia, where the individual wanders away from their place of residence is known as dissociative fugue (literally means flight). This is added as a specifier to a diagnosis of dissociative amnesia. Individuals often find themselves in a new place with no idea of how or why they got there, as seen in the case of Andera (Box 10.3). During this period, they may be unresponsive to the environment or may be confused about their identity or may even assume an alternate identity.

Box 10.3: Case study- Dissociative amnesia with dissociative fugue

Andrea, a 23-year-old female once left her office where she worked as a chartered accountant by foot at the end of her day. She spent the next few hours walking around the city and eventually boarding a train to a neighbouring state. She eventually found herself at a supermarket, disoriented. She was terrified as she was unable to remember why or how she had gotten there. According to her family, she had been missing for a few days and had no contact till she called them from the supermarket. From the day she had wandered off she had been living in the other city without remembering any of her personal details as reported by people who had met her during that period.

Dissociative amnesia usually occurs during adulthood and is the most prevalent of all dissociative disorders (Spiegel, 2010). Fugue states tend to end abruptly and the disruption in memory and identity that occurs is not always restored. Such episodes can also occur in Dissociative Identity

Disorder, a condition popularly and incorrectly named as split or multiple personality disorder in lay terms.

- **Dissociative Identity Disorder (DID)**

Box 10.4: Case study- Dissociative identity disorder

Sasha, a 25-year-old student was brought to a hospital for episodes of poor memory and odd behaviours. She was confused about the recent past and thought she was in a place a few kilometres away from the hospital. During the process of the clinical evaluation, it was noted that she had been suffering from multiple gaps in memory over the last few years and her family reported that her manner of behaving would change significantly at different times. When she had been told that she acted in a peculiar manner or that she had said some things, she was unable to remember any of these instances. She had had multiple experiences where she had injuries but was unable to recall how she had gotten them. For example, the client would take money from her father's pocket but would claim that she had found it. In these periods she was noted to behave like a child and much younger than her age. She would be highly suggestible and would call people names as suggested by a teenager who lived on her street. During one of the interviews, it was noted that Sasha was acting like a child and upon enquiry she identified herself to be a 11-year-old who likes buying candies and treats from the money she would take from her father. She then seemed to talk about another girl who was often hurt by people at home and being harassed at work. It turned out that she was talking about herself (the 25-year-old).

As described in the previous case example, the DSM 5 defines DID as experienced or observed dissociation in one's identity that is characterised by two or more distinct personalities or experiences of discontinuity in sense of self with changes in memory, emotional states and other psychological processes or experiences of possession. Sasha's lapses in memory that suggest experiences of dissociative amnesia are also a diagnostic requirement for DID in the DSM 5. The gaps in memory are not consistent with natural forgetting. This is the most severe of dissociative conditions and is usually accompanied by a number of other distressing symptoms such as depersonalization, anxiety, depression, self-harm, substance-use, eating disorders, conversion and somatic symptoms and periods of unresponsiveness or disorientation. The severity or pattern of the condition varies drastically between individuals and time periods. It is diagnosed as a mental health condition only if the disturbance is not culturally or religiously normalised or cannot be attributed to imaginary or fantasy characters.

The disturbances in an individual's identity experienced in this condition is frequently portrayed in pop culture as seen in movies such as Fight club, Split or Black Swan. It is often incorrectly or inconsistently portrayed with the person switching between personalities extremely rapidly. The fragmented identity of the person can vary in number from 3 or 4 to even a 100. They also vary significantly in terms of handedness, gender, sexual preferences and even biological factors such as skin conductance (Putnam, 1994). These personalities are termed as alters with a "host" identity usually being the one to seek treatment. The "alters" typically serve different functions such

as generating income, seeking comfort etc. The "switch" between identities while instantaneous is often dramatized or drawn out in movies.

DID had been reported to be strongly associated with experiences of severe early childhood abuse and reported more among females than men. The onset of the condition is usually in childhood around the age of 9 years.

- **Other Specific Dissociative Disorders**

Other than the three main disorders described above, DSM 5 also provides a diagnostic criteria for dissociative experiences that lie out of those descriptions. It includes chronic and recurrent experiences of mixed or atypical presentations of dissociative symptoms such as DID without experiences of amnesia or dissociative trance and possession. Trance and possession experiences are culturally or religiously prevalent in some parts of the world like in India. These conditions are considered pathological if they defy cultural norms or are undesirable (especially if they involve the perception of possession by a spirit that is bad) (APA, 2013).

10.3.2 Etiology of Dissociative Disorders

- **Biological factors**

While strong evidence is found to suggest that dissociative disorders are proximally and distally related to experiences of trauma, disorganised attachment and a number of other environmental contributions, the biological contribution to the propensity to dissociate has not been as significant. Some studies have found that the COMT (Catechol-o-methyltransferase) gene is implicated in mediating the relationship between trauma and dissociative symptoms (Savitz et al., 2007). A specific genotype of this gene was found to facilitate a link between increasing levels of dissociation in individuals exposed to higher levels of childhood trauma and the opposite was observed with another functional genotype. However, further research in this area is required to understand the contributions of heritable factors that increase the vulnerability for dissociation.

Sleep deprivation and fatigue have also been found to worsen dissociative symptoms, especially in the case of dissociative identity disorder (van Heugten – van der Kloet et al., 2015).

- **Psychosocial factors**

From the perspective of the *stress-diathesis model*, pathological dissociation requires the presence of both vulnerability and experiences that contribute to the development of a particular set of symptoms. The aetiology of dissociative conditions is similar to that of posttraumatic stress disorder where the symptoms and their severity are strongly linked with the nature and severity of traumatic experiences (Barlow & Durand, 2014). It is widely-accepted that the tendency to dissociate is rooted in a natural response of escaping from severe negative affect associated with severe abuse and trauma, including exposure to war and political conflict (Kluft, 1991; Spiegel et al., 2013). Early experiences of emotional abuse were found to be the strongest predictor of depersonalization disorder in comparison with other types of childhood trauma (Simeon et al., 2001). Dissociative amnesia and fugue states are found to occur more in response to severe life stress or trauma in the present rather than past experiences, such as legal difficulties

or stressful situations at home. DID, being the most extreme of dissociative conditions, is almost always presented with experiences of physical and sexual abuse in childhood (Gleaves, 1996). The dissociative states of DID are hypothesized to function as a coping mechanism to handle the trauma of chronic or severe abuse, neglect and violence. These coping strategies are often not identified or treated in childhood where fantasy is being used to deflect and manage aspects of the trauma and thus develop into dissociative personality states (Vissia et al., 2016).

Attachment patterns in childhood are also theorized to be a contributor to the development of DID as experiences of abuse or neglect from the caregiver prevent the child from developing a secure sense of attachment and successful integration of experiences to form an integrated identity (McLewin & Muller, 2006).

Social and cultural factors are primarily linked with the clinical presentation of dissociative symptoms. It also influences perception of what we consider to be a pathological dissociative experience (Krüger, 2019). In India, the most commonly presented dissociative condition was trance and possession disorders (Chaturvedi et al., 2009). It is hypothesized that the religious and cultural factors such as polytheism, belief in reincarnation and spirits that are more prevalent here contribute to this presentation being more common and diagnosis of multiple personality disorder (currently termed as DID) being rarely diagnosed (Varma et al., 1981).

10.3.3 Treatment of Dissociative Disorders

- **Psychological management**

Treatment of dissociative amnesia or fugue states is usually limited as in most cases it is found that these states remit by themselves after a period of time. Since the onset of these episodes is clearly associated with stressful current life events, psychotherapeutic interventions with people who experienced these conditions primarily focuses on resolution of such precipitating factors and improving their coping skills. If necessary, the person is also enabled to recall and integrate information they are missing with the help of environmental cues and other people involved in their life.

In severe conditions, which is often the case in dissociative identity disorder, a multimodal, trauma-focused approach is suggested by the International Society for the Study of Dissociation (ISSTD, 2011). This treatment guideline attempts to address the multiple dimensions of dissociative disorders such as affect disturbances, perceptual inaccuracies and co-morbid symptoms of PTSD, anxiety, substance-use, mood disorders, etc. through three phases of treatment. The first phase is focused on *stabilization* as early experiences of trauma and attachment difficulties are often reflected in adult life through impulsive, self-injurious behaviours, and dysfunctional/ abusive relationships. This phase focuses on addressing these safety issues and enhancing the patient's ability to cope with the symptoms. The second phase involves *safe and adaptive processing of the traumatic memories* to develop a coherent narrative and gain mastery over the memories. Developing the patient's *self-efficacy* is a major goal. In the third phase, patients are encouraged to develop a better understanding of their earlier difficulties in order to address its impacts on current and future life goals.

The second and third phase is where integration of the different personality states in DID occur.

- **Pharmacotherapy**

Pharmacological interventions are not the first line of treatment for dissociative conditions but they assist in stabilization and managing comorbid symptoms (Loewenstein, 2005). Studies recommend the use of medication to manage the frequent symptomatology and mood disturbances to facilitate psychological interventions. The most responsive symptoms are affective disturbances, intrusive trauma experiences and hyper arousal.

Self Assessment Questions 1

1. Read the following statements and choose the most suitable diagnosis from the following:

(a) dissociative amnesia

(b) depersonalization-derealization disorder,

(c) dissociative fugue,

(d) dissociative identity disorder and

(e) localized amnesia

1. A period of memory loss that is often accompanied by experiences of trauma or accidents and being confused are suggestive of _____.
2. Significant and even dramatic changes in one's mannerisms and preferences are usually seen in _____.
3. Feeling out of control and experiencing the surroundings or oneself as a spectator is a feature of _____.
4. Starting a new life in a new place with no idea of their past or sometimes their identity, occurs in cases of _____.
5. Being unable to recall memories associated with a particular event such as sexual assault or war or sometimes particular people is described as _____.

2. For the following questions, please choose the most appropriate answer:

1. As per DSM 5, what are the functions that get disturbed or disrupted in dissociative experiences?

(a) Consciousness

(b) Memory

(c) Identity

(d) All of the above

(e) None of the above

2. Of the different conditions given below, identify the strongest predictor of DID.

(a) Traumatic childhood experiences

(b) Substance use

(c) Emotional neglect

(d) Parental conflict

(e) Eating disorder

3. In DSM 5, how many major diagnoses are classified under dissociative disorders?

(a) 2 (b) 5 (c) 3 (d) 10

4. Identify which diagnosis would best describe my experience if I feel detached or sort of disconnected from myself.

(a) Depersonalization-derealization disorder

(b) Dissociative fugue

(c) Dissociative identity disorder

(d) Dissociative amnesia

(e) None of the above

5. International treatment guidelines for the dissociative disorders suggest the use of multiphasic, trauma-focused psychotherapy.

(a) True (b) False

10.4 SOMATIC SYMPTOM AND RELATED DISORDERS

In the DSM 5 (APA, 2013), there are five major somatic symptoms and related disorders. These disorders fall under this umbrella as they have a common thread of preoccupation with bodily functions or appearance. Excessive, maladaptive responses to physical symptoms or health concerns to the extent of functional impairment are also a significant feature. In this section of the chapter, we will discuss the clinical features of these disorders along with their etiological factors and treatment strategies.

10.4.1 Somatic symptom disorder

This disorder was first named Briquet's syndrome, after the French physician who noticed that some of his patients came in with a number of physical complaints but did not have any medical reasons for the same (APA, 1980). The current definition of somatic symptom disorder is given by DSM 5 as severe distress, persistent thought and excessive preoccupation with one or more somatic symptoms, i.e., physical health concerns for more than 6 months. This preoccupation is disproportionate and is associated with large amounts of time or resources spent on checking about their health. Based on the number and variability of the somatic complaints, and the nature of preoccupation with them, the severity of the condition can also be specified in the diagnosis. Often, the somatic complaint is associated with pain and thus this can also be mentioned specifically.

To further understand the presentation of Somatic symptom disorder, consider the case example presented in Box 10.4. Suresh's concerns meet the criteria for this disorder given in DSM 5. He seems to be experiencing persistent somatic complaints though they seem to vary. They also impede

him from performing adequately at work and he seems to be spending large amounts of time thinking about his concerns. Another common example of somatic symptom disorder is the experience of pain that is maintained or exacerbated by psychological factors, irrespective of the presence of a physical reason for the pain. This was previously diagnosed as pain disorder. The major point of concern in this diagnosis is not the presence or absence of a physical reason but rather the psychological experience of distress, anxiety or preoccupation with health (Henningsen, 2018)

Box 10.4 Case study for Somatic symptom disorder

Suresh, an office worker in his 30's reported that he has been experiencing considerable backache in the last few months. He added that he has had a number of similar problems in the last few years but no one could clearly diagnose the reasons for them. He has been to a number of hospitals and has been on a variety of medication, but has not had any length of time when he felt healthy. He was extremely distressed by his recurring pain that were also making it difficult for him to perform adequately at work. He would either spend most of his time worrying about his health while in the office or he would take days off to seek help and recover.

10.4.2 Illness anxiety disorder

Formerly known as "hypochondriasis", illness anxiety disorder is characterised by excessive concern with the possibility or idea of being sick. This is in contrast to the previously discussed diagnosis where the preoccupation is with the physical symptoms. Consider the following case example (Box 10.5).

Box 10.5- Case study for illness anxiety disorder

Raksha, a 40-year-old woman living in a metropolitan city and has been to a number of health care service providers in the last 5 years as she has been concerned that she may be having cancer. One of her close friends had gotten diagnosed with cancer 5 years ago when she had gone in to seek medical help for fatigue and abdominal pain. Raksha remembers thinking that since she is the same age as her friend, she might also possibly have cancer. As a result she sought medical professions and investigations to rule out this possibility. However, she found herself being unsatisfied with the findings of these investigations that were turning out negative. This led to multiple and varied consultations to the extent that she has had a number of investigations done from blood screening to CT and MRI scans in this time period. She tends to go in for a consultation every time she finds herself feeling a bit tired or experiencing pain as a result of regular physical activity. Every day she examines herself in a mirror for any lumps or irregularities that may suggest cancer.

Comparing the last two case studies (Box 10.4 and 10.5), we can see that both are associated with fear and anxiety about their physical health. However, Raksha is less concerned with specific symptoms and focuses more on the possibility of a specific illness. She is likely to always be on the lookout for any indications of cancer though she did not find any somatic concerns that are currently present. There is also significant distress and anxiety about her

health. These factors, the lack of better explanation for her current concerns and their duration of 5 years (longer than 6 months) indicate a diagnosis of illness anxiety disorder.

The majority of individuals with this diagnosis seek extensive medical care and yet feel dissatisfied. They generally tend to utilize a large number of resources for medical care such as health check-ups and scans, to the exclusion of mental health assistance. However, a portion of individuals experience a paradoxical increase in anxiety associated with diagnostic tests and thus avoid seeking help even though they are distressed about the possibility of falling ill. It is also possible that owing to repeated experiences of unsatisfactory health care consultations where their concerns may not be taken seriously, they may not get an accurate diagnosis or treatment when necessary. Thus, the DSM 5 criteria also provide scope to specify the type of care-seeking behaviour the person is engaging in. The illness that the person is worried about acquiring or having acquired might change over a period of time.

Etiology of somatic symptom and illness anxiety disorder

Research on the pathological process of somatic symptom disorders highlights the role of heightened awareness of bodily sensations and the tendency to interpret these sensations as indicative of a medical illness. They are proposed to be disorders of cognition and perception that are associated with a strong emotional component amplified by psychosocial factors (Van den Bergh et al., 2017). It was found that the accuracy of understanding interoceptive cues (stimuli arising within the body that may be interpreted as signs of ill health) would deteriorate with increasing distress associated with the symptoms. Such misinterpretation is hypothesized to follow a sequence of steps starting with a heightened vigilance for health related, an attentional bias to perceived threat to one's well-being. This information activates the individual's faulty assumptions and beliefs about illness and health such as "changes are indicative of serious illness", "I should have no symptoms if I am healthy" and "these symptoms might become a big problem if I ignore them". As a result, the individual increases their attention towards such symptoms and the cycle continues with cognitive, behavioural and emotional consequences such as increased physiological arousal, anxiety, preoccupation with concerns of health, checking and reassurance seeking (Witthöft & Hiller, 2010).

Genetic basis for the predisposition to distress associated with bodily symptoms was not strong in most of the research, however, they noticed a potential link between childhood adversities and increased bodily distress (Afari et al., 2014). This leads us to exploring the contributions of childhood experiences to the predisposition for these conditions. Attachment patterns with maternal insensitivity and insecurity were found to predict somatization as well as health anxiety (Le et al., 2021). Individuals may also learn to be more vigilant of bodily distress based on modelling by caregivers in childhood. This could contribute to the development of dysfunctional assumptions or beliefs. Cultural factors also play a role in predisposing individuals to somatising tendencies and focus on bodily distress (Kirmayer & Sartorius, 2007).

Management of somatic symptom and illness anxiety disorder

Recent research on the management of somatic symptom disorders has attempted to compile existing evidence on effective treatment, the unmet needs of the patients and the barriers to better treatment (Henningsen, et al., 2007). In the realm of psychotherapy, it is important to establish a good working rapport as these individuals are likely to have been to a number of health consultations and their concerns may have been dismissed. Engaging with them and taking their concerns seriously can help in further engagement in therapy. Providing ongoing support and reassurance was found to be helpful, provided it was delivered in an effective manner with sufficient time given to the client's concerns (Haenen et al., 2000).

Cognitive Behavioural Therapy (CBT) was found to be effective in teaching clients that physical symptoms can be induced by focusing on certain body areas and in helping them identify and challenge beliefs regarding illness and heath (Escobar et al., 2007). As the presence of additional life stressors may exacerbate symptoms, enhancing coping skills and reducing stress can also reduce the frequency of care-seeking. These can be targeted in therapy by identifying stressors, building active, practical strategies to manage them and implementing them.

Reattribution therapy is one of the most frequently examined intervention that is carried out in three phases such as communicating understanding and empathy about their symptoms, beliefs, exploring possible explanations other than physical for the symptoms and finally making a link between psychosocial factors and physical symptoms. It was found to be effective in engaging clients in therapy though the effects were not found in the long-term (Toft et al., 2010).

10.4.3 Psychological factors affecting medical condition

The significant feature of this disorder is the presence of psychological or behavioural factors that negatively affect a medical condition. These factors may increase the suffering, risk of death or disability, for example through their influence on adherence to medical advice, or denial of treatment. This can happen in the context of existing health conditions such as asthma, hypertension or diabetes or it may also be associated with ignoring medical symptoms such as dizziness or fatigue. This is hypothesized to be a result of anxiety, depression, stressful life events, relationship styles and personality variables. They influence the physical health of the individual as their cause a strain on their available resources; the person might find it more distressing and taxing to handle their health concerns with the presence of significant psychological distress. This diagnosis is a cause for concern as one's attitude towards health preserving behaviours can influence the trajectory of even severe conditions such as cardiovascular disease, AIDS and cancer. They may not take essential steps such as monitoring blood pressure, preventing secondary infections or regular intake of medications.

10.4.4 Conversion disorder (Functional neurological Symptom Disorder)

Conversion disorder was popularized by Freud's work on unconscious conflicts that result in anxiety that is expressed as physical symptoms rather

than psychological symptoms. This condition is now diagnosed as Functional neurological symptom disorder as most individuals experience neurological symptoms, usually sensory motor impairments, that are not accompanied by other recognized neurological and medical symptoms. The absence of an attributable organic cause leads to this condition being identified as a 'functional' disorder. Additionally, the term 'conversion' carries links to a psychoanalytic theory about the aetiology of these symptoms and thus will be removed from the DSM.

To understand the clinical presentation of this disorder, we will look at the case example presented in Box 10.6. Sana was found to have loss of sensation in her legs, in addition to other physical ailments that were presented without any identifiable medical condition as the symptoms were not part of any particular syndrome or have any positive findings on diagnostic investigations. Other commonly seen presentations in this condition are mutism, loss of sensation in other parts of the body, paralysis of certain parts of the body, tingling sensations, loss of vision, seizure-like episode and sensation of a lump in the throat (Finkenbine & Miele, 2004). Most individuals with this condition are able to use the affected motor and sensory symptoms unconsciously in emergency situations.

Box 10.6- Case study for conversion disorder

Sana, a 15-year-old high school student was admitted to a general hospital with flu-like symptoms which proceeded to persistent vomiting and nausea. As investigations ruled out possibilities of any infection, she was discharged from the hospital after 2 days with medications to manage the symptoms of nausea and vomiting. In the next few days her condition seemed to worsen with her legs starting to feel weak even if she was standing for a few minutes. She was then evaluated by other specialists such as cardiologists and no organic causes were notable for her symptoms. Over the next 2 weeks her symptoms seemed to grow into numbness of legs and being unable to get up or stand without aid. She was then referred to a neurologist. While no biological causes for her symptoms were found, it was noted that she grew up with her father being physically abusive towards her and her mother until the age of 13 years, when her mother divorced her father and they moved to a new city. A few months later they moved again to live with her maternal grandparents and had to switch to a new city, school and living environment.

One of the controversial aspects of conversion disorder is the possibility of the conversion reactions and symptoms being a result of an undiagnosed physical disorder or even being faked by the individual. Initially, an attitude of indifference towards the symptoms, called La belle indifference, was considered to be an indicator of conversion disorder rather than a physical condition. However, it was later evident that even in cases of actual physical disorder, a number of patients displayed indifference to their symptoms (Stone et al., 2006). Other factors that may help in correctly diagnosing conversion symptoms is identifying the presence of precipitating stressors and sudden remission or utilization of the lost sensory or motor function, such as being able to dodge an obstacle though they may report being unable to see it. It is also important to distinguish conversion disorder from

malingering, i.e. a person intentionally faking symptoms. Malingerers are fully aware of the difficulties they are faking and usually do so in order to manipulate others and to obtain some gains.

10.4.5 Factitious disorder

Another psychiatric condition that needs to be discussed here is factitious disorder, a disorder that shares features of both malingering and conversion disorder. The symptoms that are reported by the individual are under voluntary control in a manner that is similar to malingering, while there is no obvious reason for the person to be displaying these symptoms other than increasing attention by assuming a sick role. This is similar to conversion disorder as possible secondary gains from being identified as the patient is considered to be a maintaining factor. A more concerning presentation of this disorder is one in which the sick role is extended to other members of the family, especially a mother presenting her child as sick. The adult usually engages in deliberate acts to make the child appear sick by faking test results or they may even induce injury or illnesses. This is called factitious disorder imposed on another. This atypical abusive behaviour lets the individual gain attention they desire and is also known as Manchausen syndrome by proxy.

Aetiology

Functional neuroimaging studies on individuals with functional neurological symptoms suggest that abnormalities in processing emotions can serve as a vulnerability factor, while differential reaction to different stressors or trauma can occur (Ejareh dar & Kanaan, 2016). However, this does not lend itself to any particular theoretical explanation of the symptoms. Psychoanalytic theory proposed by Freud describes four basic processes in the development of conversion disorder. He proposed that when a person encounters an unconscious conflict that is unacceptable. The person experiences anxiety which cannot be expressed in an appropriate manner and thus is repressed from conscious experience. The anxiety continues to increase and threatens to enter consciousness, it is converted into physical symptoms and thus the anxiety is alleviated. This process is reinforced by the presence of positive outcomes from assuming the sick role, known as secondary gains. This includes increased attention, avoidance of conflict or problematic situations and sympathy.

From a socio-cultural perspective, the varying incidence rates of conversion disorder across societies and nations also provide evidence regarding factors that can contribute to its aetiology. This condition was found to occur more in less educated and poor socio-economic backgrounds (Brown & Lewis-Fernandez, 2011). In these populations, knowledge about mental health and illnesses is not well developed. Further these disorders were found to be decreasing over the years suggesting that better knowledge and understanding about health and well-being may serve as protective factors or mitigate the vulnerability factors.

Management

A recent systematic review of the effectiveness of psychosocial interventions in the management of conversion symptoms found that the available literature is relatively small (Ganslev et al., 2020). They noted that a broad

variety of interventions such as behaviour therapy, cognitive behaviour therapy, hypnosis, paradoxical intervention and psychoeducational have been applied in the management of conversion symptoms. They did not find any strong evidence supporting the use of any one particular intervention. The authors suggest the integration of patient preferences, values and background information to decide on appropriate interventions. A commonly used intervention strategy is to identify and resolve traumatic or stressful life events. Addressing the secondary gains and reducing their reinforcing properties is another important aspect of symptom management. However, this might be difficult as it often involves participation of other members in the intervention, such as parents being involved in the management of conversion symptoms presented by children. Additionally, Hypnosis and CBT was found to be associated with improvement of symptoms for 60-65% of the participants (Moene et al., 2003).

Self Assessment Questions 2

1. Identify the appropriate diagnosis for the case summaries from one of the following:

(a) Illness anxiety disorder

(b) somatic symptom disorder,

(c) Functional neurological symptom disorder

1. Constant worries about the possibility of acquiring or having a serious disease like cancer or diabetes is a symptom of _____.
2. Preoccupation and excessive distress about one or more physical symptoms such as pain, fatigue or difficulty in breathing that is not supported by any definitive diagnosis is often experienced by people with _____.
3. Sensory or motor impairments such as loss of sensation, seizure-like episodes or loss of function of a limb, that occur without any accompanying neurological or biological dysfunction is a symptom of _____.

10.5 LET US SUM UP

Dissociative disorders

- Dissociative disorders are characterised by loss of continuity in experiences or memory, sense of identity, and distorted perception of oneself or the environment. Three disorders classified under the dissociative disorders are: Depersonalization-derealization disorder, Dissociative amnesia, and Dissociative identity disorder.
- Stress-diathesis model is often used to understand the aetiology dissociative disorders. According to this model, presence of both vulnerability and stressful experiences contribute to the development of a particular set of dissociative symptoms. The tendency to dissociate is explained to be rooted in a natural response of escaping from severe negative affect associated with severe abuse and trauma. Early experiences of emotional abuse, sexual abuse, violence, severe

stressful life experiences, childhood neglect, are implicated in the development of dissociative disorders.

- Treatment of dissociative amnesia or fugue states is usually limited as in most cases it is found that these states remit by themselves after a period of time. Since the onset of these episodes is clearly associated with stressful current life events, psychotherapeutic interventions with people who experienced these conditions primarily focuses on resolution of such precipitating factors and improving their coping skills. If necessary, the person is also enabled to recall and integrate information they are missing with the help of environmental cues and other people involved in their life.
- A multimodal, trauma-focused approach is suggested by the International Society for the Study of Dissociation. This treatment guideline attempts to address affect disturbances, perceptual inaccuracies and co-morbid symptoms of PTSD, anxiety, substance-use, mood disorders, through three phases of treatment: stabilization, safe and adaptive processing of the traumatic memories and development of self-efficacy.

Somatic symptom disorders

- Somatic symptom disorders share common symptoms such as preoccupation with bodily functions or appearance, and excessive or maladaptive responses to physical symptoms or health concerns to the extent of functional impairment. A majority of individuals with this these disorders seek extensive medical care and yet feel dissatisfied.
- The disorders classified under this category include somatic symptom disorder, illness anxiety disorder, psychological factors affecting medical condition, conversion disorder and factitious disorder.
- Etiological factors include heightened awareness of bodily sensations and misinterpretation of bodily dues in these individuals, attentional bias to perceived threat to one's well-being, faulty assumptions and beliefs about illness, which results emotional consequences such as increased physiological arousal, anxiety, preoccupation with concerns of health, checking and reassurance seeking. Attachment patterns with maternal insensitivity and insecurity, and socio cultural factors are also found to play an important role.
- The psychological interventions emphasize on establishing a good working rapport with these individuals. Engaging with them and taking their concerns seriously, providing ongoing support was found to be helpful. Cognitive Behavioural Therapy (CBT) and reattribution therapy are found to be the most effective therapies in somatic symptom disorders. Additionally, resolving traumatic or stressful life events, addressing the secondary gains are also found to be the important components of the psychological therapies.

10.6 KEY WORDS

Dissociative disorder is characterised by (a) subjective loss of continuity in experiences or memory due to unwanted intrusions, (b) gaps in memory,

sense of identity or consciousness due to lack of accessibility/control of information or mental functions, and/or (c) Experiences of distorted perception of oneself or the environment in a disconnected manner (Cardeña and Carlson, 2011).

Depersonalization is a loss of one's sense of themselves where they feel as if watching themselves and their reactions from outside.

Generalized amnesia refers to dissociative amnesia which may leave a person unable to remember anything about themselves.

Dissociative fugue is a variation of dissociative amnesia, where the individual wanders away from their place of residence.

Stress-diathesis model emphasizes on the presence of both vulnerability and experiences that contribute to the development of a particular set of symptoms in psychopathology.

Somatic symptom disorder refers to severe distress, persistent thought and excessive preoccupation with one or more somatic symptoms, that is, physical health concerns for more than 6 months as given by DSM 5.

Illness anxiety disorder is characterised by excessive concern with the possibility or idea of being sick.

10.7 ANSWERS TO SELF ASSESSMENT QUESTIONS

Answers to Self Assessment Questions 1

1. (a), 2. (d), 3. (b), 4. (c), 5. (e), 6. (d), 7. (a), 8. (c), 9. (a), 10. (a)

Answers to Self Assessment Questions 2

1. (a), 2. (b), 3. (c)

10.8 UNIT END QUESTIONS

1. Provide a clinical description of dissociative disorders.
2. Elucidate the treatment of dissociative disorders.
3. Discuss the causes and treatment of somatic symptom disorder and illness anxiety disorder.
4. Explain factitious disorder in terms of its etiology and management.

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UNIT 11: FEEDING AND EATING DISORDERS*

Structure

11.1 LEARNING OBJECTIVES

After studying this Unit, you would be able to:

- *Describe the feeding disorders;*
- *Explain the nature of eating disorders and their major types;*
- *Discuss the clinical presentation of anorexia nervosa;*
- *Differentiate between the binge and purge cycle in bulimia nervosa;*
- *Explain the clinical picture of bulimia nervosa and how it is different from anorexia nervosa;*
- *Describe the clinical features of binge eating disorder;*
- *Identify the causal factors underlying eating disorders; and*
- *Elucidate the treatment for eating disorders.*

11.2 INTRODUCTION

Eating is a major part of human lives and has also social and cultural significance. It is a normal activity in our daily life. Parents often complain about eating problems in their children. We all also have our specific food preferences. However, food and eating activity which are normally enjoyed by human beings can also have negative consequences and affect our psychological well-being. DSM 5 has listed feeding disorders and eating disorders in one category that represents disorders related to eating

* Adapted by Prof. Swati Patra, Discipline of Psychology, SOSS, IGNOU from Unit 7 of BPCC 133 (BAG programme, IGNOU) written by Dr. Itisha Nagar, Department of Psychology, Kamala Nehru College, University of Delhi, New Delhi.

behaviour. Both these disorders can occur at any age, though mostly seen in children and young adults. Feeding disorders involves unusual eating of substances without any nutritional value, whereas eating disorders involve problems related to eating normal food.

Almost everyone has looked into the mirror and experienced dissatisfaction with their body weight at some point of time in their lives. Body dissatisfaction and weight concerns are common amongst women, especially during the adolescence and young adult stage. Although all throughout life, both males and females show some concern regarding their body weight and appearance. The hectic lifestyle of today associated with consumption of fast food and lack of exercise highlights this concern more.

Body dissatisfaction may be healthy and adaptive in some individuals as it may motivate them to lose weight and change to a healthier lifestyle. Achievement of normal body weight through regular exercise and healthy eating is beneficial for our physical and mental health. However, in some individuals the concern about body weight is somewhat more extreme, they are likely to think they are overweight even when they are not. They may engage in excessive dieting and vigorous exercise to lose weight, which in turn may lead to negative social, emotional, behavioural and medical consequences for the individual. This *drive for thinness* leaves them distressed and dysfunctional, i.e., affecting their interpersonal, social, and occupational lives. Under these circumstances the experience of intense body dissatisfaction is classified as an eating disorder.

Eating disorders are defined as severe disturbances in eating characterised by: (a) weight concerns, (b) body dissatisfaction, and (c) eating problems that are more extreme than the normal, causing the individual significant distress and dysfunction. DSM-5 classifies three major types of eating disorders. First, **anorexia nervosa** in which the individual eats minimal food and the body weight drops to dangerously low levels. Second, **bulimia nervosa** is a condition in which the individual engages in episodes of binge eating (uncontrollable eating) and then indulges in self-induced ways of throwing the food out like vomiting, use of laxatives, or other attempts. Finally, **binge-eating disorder** is a condition in which individuals binge repeatedly but the episodes are not followed by compensatory mechanisms to throw it out of the body.

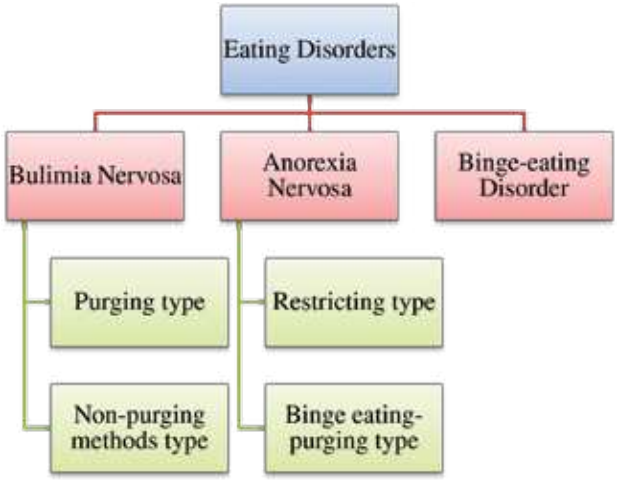

Fig. 11.1 Major Types of Eating Disorders

In this Unit, we will discuss various feeding disorders and also look into the clinical features, causes and treatment of anorexia nervosa, bulimia nervosa, and binge-eating disorder.

11.3 FEEDING DISORDERS

Feeding disorders consist of three types. Unlike the eating disorders, particularly anorexia nervosa and bulimia nervosa which involve problems related to perception of body shape and weight, feeding disorders do not include any such disturbance in perceiving their body shape and weight.

Pica: It involves eating non-nutritive substances, i.e., non-food items such as chalk, coal, paste, clay, paint etc. These non-food items can be harmless such as ice, or harmful like paint etc. It is usually seen more in underdeveloped countries than developed countries (Ray, 2015, p. 363). Sometimes, it is displayed during pregnancy and may be accepted in the culture. However, if such feeding behaviour persists over a month, it can be considered as disorder.

Rumination disorder: As the term indicates (rumination means going over a thought again and again, or brooding over it), the person ruminates about the food by actually eating it and then re-eating it. That is, the person regurgitates the food eaten, re-chews and re-swallows it or spits it out. Here also, the diagnosis requires that it has lasted for more than a month and is not associated with any other medical condition or eating disorder.

Avoidant/restrictive food intake disorder: It involves avoiding certain food items due to their disliking of the color of food, or any other characteristic related to food. Thus there is sensory aversion to particular foods pertaining to their look, colour, smell, taste, or due to past unpleasant experiences associated with that food. As a result, the person does not get proper nutrition and it has adverse health outcomes.

11.4 ANOREXIA NERVOSA

- **Clinical Picture**

Anorexia literally means 'lack of appetite induced by nervousness', but this definition is a misnomer because it is not a lack of appetite but a fear of gaining weight. In bulimia (you will learn it in the next section), majority of individuals are within 10 percent of their body weight, however, people with anorexia are dangerously underweight. The defining feature of anorexia is that people are significantly underweight relative to their age, sex, developmental trajectory, and physical health. However, people may lose significant amount of weight because of many reasons, including medical reasons. But in case of anorexia, this significantly low weight of the individual is because of an intense fear of gaining weight or becoming fat.

Although there is a popular misconception about people with anorexia, that they do not feel hungry, however this is not true. People with anorexia, feel hungry and often think about food but their intense dissatisfaction with their bodies drives them to almost starvation. People with anorexia are never comfortable with their body weight no matter how significantly underweight they might be. In fact, even staying the same weight (under-

weight) or gaining slight weight can cause intense panic, distress, anxiety and depression.

Thus, people with anorexia show disturbance in the way they experience their body, for instance they may have distorted body image, while others may see themselves as emaciated and 'skinny', they may continue to see themselves as 'fat'. Similar to people with bulimia, their self-evaluation may be unduly influenced by their perceived body shape and size. In spite of being told about the life-threatening consequences of their low body weight, they may show lack of seriousness towards these concerns.

Activity 1: Do men also feel the pressure of body image?

Usually women in any society have felt the pressure of conforming to the idealized body standards depicted by peer, family, society and culture, be at any period in history. And this may lead to problems in their eating behaviour and disturbances in their body image resulting in low self esteem. Men are also idealized to have a standard body type that is muscular and depicting strength.

- Do you think men also feel the same pressure to conform to the standard body image for men as depicted by the society and culture?
- Do men also feel disturbances in their perception of body image similar to women?
- How do homosexuals deal with their body image?
- Try to talk to a few such people and find out their views and perception of body image and eating behaviour.

DSM-5 has specified two sub-types of anorexia nervosa: the *restricting type* that includes individuals who diet excessively to limit the calorie intake and *binging-and-purging type*, in which they rely on purging. People with restricting type would skip meals, eat slowly, count calories consistently, drink a lot of water between meals to feel full, dispose their food when others are not looking etc.

Anorexia usually begins in adolescence, when an adolescent perceives self to be overweight. They then start a diet that escalates into an obsession with thinness. Dramatic weight loss is achieved through restricted eating or by combining caloric restricting with purging.

Fig. 11.2: Distorted Body Image in People with Anorexia

Source: https://www.dreamstime.com

Box 11.1 Case Study: Anorexia Nervosa

Anushka had always been a chubby child. Her friends and family always teased her for being 'fat'. In particular she remembered when she was in class 9th, one of her uncles commented about her body weight and shape, "you're so fat, who will marry you. Lose some weight." She remembers that she has always been discontent with her body weight, shape and size. In class 10th, she started actively looking for ways to reduce weight. Gradually, there was an increasing concern over growing fat, she started skipping two meals and would take only one meal and salad. She put up posters of female movie celebrities in her bedroom and would idealize them, often wishing to have bodies like them. She started exercising for 1-1½ hours in order to compensate weight gain out of binging. She would binge on food 5-6 times a month and would regret afterwards and would try to induce vomiting. She even started smoking secretly to reduce weight, along with skipping meals asshe was afraid of becomin obese. Her family noticed that she was obsessed over her looks, weight, and spend hours in gyms and dieting. Over next 6-7month period, she lost up to 20 kg and looked frail, although she still found herself being 'fat'. Because she was still unhappy with how she looked, she went for a liposuction (cosmetic surgery for removing excess fat) without informing her family and even sold her gold necklace to pay for it. Her academic performance deteriorated, she failed her class 11th exams. Her social life was almost non-existent; she did not have time to be with her friends who would find her "weight obsession" too weird and extreme.

Box 11.2 DSM 5 Criteria for Anorexia Nervosa (APA, 2013)

A. Restriction of energy intake relative to requirements leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health.

B. Intense fear of gaining weight or becoming fat, even though underweight.

C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

   – Restricting sub-type: weight loss is accomplished exclusively through caloric restriction (i.e. dieting, fasting) and/or excessive exercise; the individual has not binged or purged in the last 3 months.

   – Binge-eating/purging subtype: the individual has binged (subjective or objective binge episodes) or purged in last 3 months.

Associated Features of Anorexia

Anorexia is associated with serious medical conditions. One of the most common medical problems is *amenhorhea* or cessation of menstrual cycle in women. Other problems include dry skin, brittle hair/nail, sensitivity to cold temperature. Cardiovascular problems like low blood pressure and

heartbeat can also occur. If vomiting is part of anorexia, then electrolyte imbalance can occur leading to heart and kidney problems. With respect to comorbidity, as with bulimia, anxiety disorders and mood disorders are common in people with anorexia also. Substance abuse is also a comorbid condition in people with anorexia. One anxiety disorder in particular, Obsessive compulsive disorder (OCD) often co-occurs. It has been noted that, anorexia and OCD have some similar features, for instance, in anorexia there are intrusive thoughts about fear of gaining weight and also individuals may engage in ritualistic behavior. Future research will be able to give us more clarity about whether the two disorders are truly similar or merely resemble each other.

11.5 BULIMIA NERVOSA

Clinical Picture

The word bulimia comes from Greek word *bous* (meaning ox) and *limos* (hunger).The core feature of bulimia is recurrent episodes of binging i.e. eating large amount of food, typically junk food than most people would in the same situation followed by use of compensatory mechanisms (vomiting, excessive exercising, laxatives, dieting etc.) to overcome the guilt of weight gain. For instance, Princess Diana would have binge episodes in which she would eat up anything she could get her hands on and would then induce vomit to throw the food out. A typical binge and purge episode is characterized by the following: 1) eating much more rapidly than normal, 2) eating until feeling uncomfortably full, 3) eating large amounts of food when not feeling physically hungry, 4) eating alone because of feeling embarrassed by how much one is eating, 5) feeling disgusted with oneself, depressed, or very guilty afterwards. Apart from eating a large amount of food in short duration, binging is also characterised by experience of lack of control. This feature was also present in binge episodes of Princess Diana, initially started as a 'new method to diet', she found herself increasingly losing control with every subsequent binge episode.

Another important criterion is that the individual uses inappropriate compensatory mechanisms to prevent weight gain. Based on the method used, bulimia can be classified as *binging and purging type* and *binging and non-purging type*. In the purging type, the individual induces vomiting whereas in non-purging type, the individual uses other mechanisms including misuse of medicines like laxatives (drugs that relieve constipation), diuretics (drugs that result in loss of fluids through increased urination), enemas, or any other medications, long period of fasting and excessive exercise. Majority cases of bulimia are the purging type and researchers have found little evidence of any major differences in frequency of binge episodes, comorbid disorders like depression and anxiety, and severity of the psychopathology between the two, and thus DSM-5 has dropped the distinction.

DSM-5 has added a criterion that was not previously there in DSM IV; self-evaluation in people with bulimia nervosa is unduly influenced by body shape and weight. People with bulimia believe that in spite of their various achievements and success, their self-esteem and popularity will be largely determined by how their bodies look. For instance, from the outside,

Princess Diana was loved by all for her generous nature and charity work, however, she exclusively focused on the shape and size of her body (see Box 7.1).

Box 11.3 Case Study: Bulimia Nervosa

Princess Diana revealed that bulimia nervosa began for her a week after her engagement with Prince Charles of England. She recalled how her then fiancé, Prince Charles put hand around her waist and said: "bit chubby here, aren't we." Princess Diana discovered that she could lose weight if she binged on food and then vomited it out later on. She recalled in an interview, "anything I could find I would gobble up and be sick two minutes later." She felt thrilled at first at finding a "new method of dieting", but increasingly found her self in a downward spiral. She confessed that her eating problems were intensified because of her troubled relationship with her husband. Years later, she was finally forced to seek help. Diana said during the 1993 speech, "From early childhood many had felt they were expected to be perfect, but didn't feel they had the right to express their true feelings to those around them — feelings of guilt of self-revulsion and low personal esteem. Creating in them a compulsion to 'dissolve like a dispirin' and disappear." In the speech, Diana commented about the possible role of 'expectations of perfection' and 'low self-esteem' in the development of bulimia.

Later in life, Diana became an eating disorder awareness advocate.

Fig. 11.3: Princess Diana

Source: https://starcasm.net

Box 11.4 DSM-5 Criteria for Bulimia Nervosa (APA, 2013)

A. Recurrent episodes of binge eating. An episode of binge eating is characterised by both of the following:

   1) Eating, in a discrete period of time (e.g., within a two hour period), an amount of food that is definitely larger than what most people would eat during a similar period of time and under similar circumstances.

   2) Lack of control over eating during the episode (e.g., a feeling that you cannot stop eating, or control what or how much you are eating).

B.	Recurrent inappropriate compensatory behavior to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, fasting, or excessive exercise.
C.	The binge eating and inappropriate compensatory behaviors both occur, on average, at least once a week for three months.
D.	Self-evaluation is unduly influenced by body shape and weight.
E.	Binging or purging does not occur exclusively during episodes of behavior that would be common in those with anorexia nervosa.

- **Binge and Purge Cycle**

The binge and purge cycle usually begins with excessive dieting, i.e. almost starving oneself motivated by a desire to look thin. During these early stages the person diets and eats low-calorie foods. Extreme diets can aggravate the associated negative emotions like anxiety and stress. Combined with hunger, anxiety can trigger a binge episode in which a person starts to eat junk food like (chips, cola, chocolate, pizza, ice-cream). While initially, a binge episode feels good, but soon enough the person starts experiencing shame and self-hatred over the loss of control. The person begins to vomit, fast, exercise excessively, or abuse laxatives. Even though people with bulimia are disgusted of their behavior, binging and purging persists.

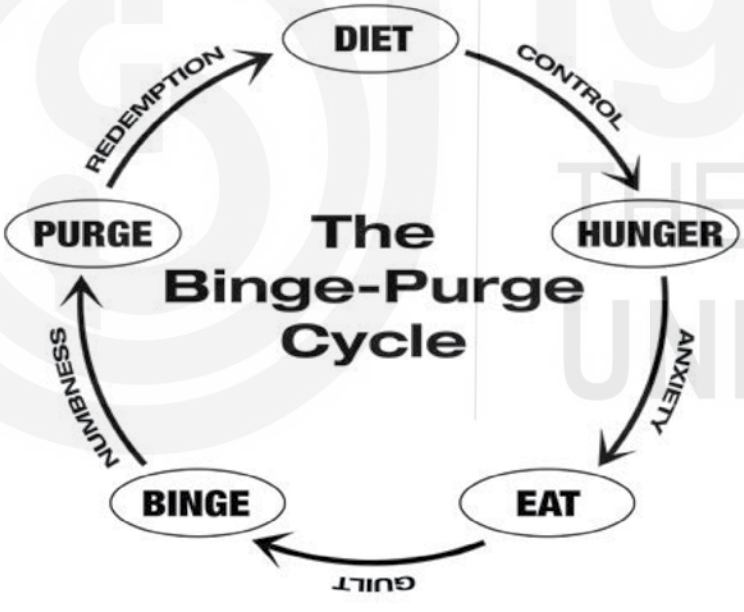

Fig. 11.4: The binge-and-purge cycle in Bulemia
Source: https://www.gurzebooks.com

Associated Features of Bulimia

People with bulimia are plagued with negative emotions like shame, guilt, embarrassment, and self-deprecation. For this reason, eating disorders often co-exist with mood disorders and anxiety disorders. Further, there are severe medical consequences of bulimia nervosa. Excessive vomiting can lead to dental problems, swelling of salivary glands, esophageal problems, whereas overusing laxatives, diuretics can lead to chronic diarrhea, or bowel problems. One of the most common side effects of abusing various medications as a compensatory mechanism for binging is dehydration.

Continued vomiting can lead to electrolyte imbalance, cardiac arrhythmia, seizures, and renal failure, which can be fatal.

Differences between Anorexia Nervosa and Bulimia Nervosa

- First, people with anorexia who binge and purge are different from people with bulimia in being severely underweight, whereas people with bulimia are typically of normal weight. If a person who binges or purges also meets criteria for anorexia nervosa, she/he is given the diagnoses of anorexia and not bulimia. This is because there is greater mortality associated with anorexia than with bulimia.
- Second, unlike people with bulimia, people with anorexia, binge smaller amount of food and purge more regularly, in some cases they may purge after every meal.
- Third, a typical person with anorexia would deny the seriousness of their condition whereas a person with bulimia does not have this denial or a complacent mindset regarding his/her condition.
- Finally, it is not uncommon to find a feel of pride in people with anorexia regarding their diets, weight, and extraordinary control over them. However, people with bulimia are likely to be ashamed of both their eating issues and lack of control. Thus, anorexia is marked by ability to control food intake while bulimia is associated with losing control over food intake.

Prevalence

Eating disorders affect almost 9% of the population worldwide (Galmiche et al, 2019). According to APA, (2013) the prevalence rate is higher for bulimia nervosa (1-3 percent) relative to the rate for anorexia nervosa (0.5 percent). Studies in the Indian context (Mohandoss, 2018) have found that the rate of anorexia nervosa is ten per 100,000 in Indian males, and 37.2 per 100,000 in Indian females in Tamil Nadu State.

The age of onset is early adulthood, 18-21 years with a greater number of women suffering from this condition than men (Hoek & van Hoeken, 2003). In case of bulimia, women receive 90-95 percent of the diagnoses (Jones & Mogan, 2010). Men have later age of onset, predominantly gay or bisexual. Rates of eating disorders are higher in men who are in sports that require weight regulations. It is important to note that the condition may be underdiagnosed in men as unlike women. Men do not have the same need as to reduce weight or shape concerns, their needs are concerned with muscularity.

Eating disorders typically have a chronic course; early childhood predictors include history of obesity and an overemphasis in family to be thin. They are difficult to treat and relapse rates are higher. However, recovery is possible over a longer period of time. Even when people recover, residual issues with eating remains, such as concern with body shape and weight and a tendency to binge and purge when upset.

11.6 BINGE EATING DISORDER

Binge eating disorder is marked by excessive uncontrolled eating which results in being overweight and obese. As Stunkard (1959) denotes, it involves

repeated episodes of eating excessive amount of food without purging. That is why, it is seen more in cases of overweight people (prevalence of 2.9%) as compared to 1.5% prevalence rate in people with normal weight (Ray, 2015). Another study (Hudson et. al., 2007) reports a lifetime prevalence of binge eating disorder 2% in men and 3.5% in women. Binge eating disorder differs from bulimia nervosa in that it does not involve any compensatory behaviour to purge the food out. Consequently, such people tend to be overweight and obese. One word of caution here is to differentiate obese people who are also into binge eating condition and obesity due to family genetic factors.

The main synptoms include:

- *Uncontrolled eating*
- *Frequent and excessive eating*
- *Lack of purging*
- *Usually eat alone due to guilt and shame of eating so large quantity of food*

11.7 CAUSES OF EATING DISORDERS

As is the case with all disorders, biological, psychological, and socio-cultural factors contribute to the development of eating disorders. However, the most dramatic factors influencing the development of eating disorders are socio-cultural factors. According to the **diathesis-stress model,** biological diathesis (genetics or neurochemical features) that lead to dysregulation in mood and eating behavior interact with psychological vulnerabilities such as low self esteem, need to seek perfectionism, impulsivity, body dissatisfaction, and distorted body image, and environmental factors such as media based pressures, child maltreatment, family conflict, social pressures, abuse etc. resulting in eating disorders.

1) Biological Factors

The biological causes of eating disorders can be identified on the basis of the following:

Twin and Family Studies*:* Twin and family studies evince for the heritability of eating disorders. The tendency to develop eating disorders runs in families i.e. biological relatives of people with anorexia and bulimia have increased rates of these eating disorders themselves. Studies suggest that relatives of people with eating disorders is 4 to 5 times higher, with rates higher for female relatives of patients with anorexia. Researchers suggest that there is a shared genetic composition for people with the different types of eating disorders, referred to as the broader *eating disorder phenotype.* However, eating disorders are not as heritable as are mood disorders and schizophrenia. A person might inherit a tendency to be emotionally responsive to stressful situation and as a consequence eat impulsively in an attempt to relieve stress. This biological diathesis may interact with social and psychological factors to lead to development of eating disorders.

Biological Set-point*:* Our bodies have a biologically determined set point for weight that is difficult to change. Whenever we move away from this

biological set point, sensation of hunger is created. The more we move away from the set point, the more and more hungry we become encouraging us to eat and gain weight in order to return to the set point. Chronic dieting enhances the chances of an individual with bulimia feel irresistible urge to binge high calorie food.

Neurotransmitters*:* Serotonin is a neurotransmitter that is involved in obsessiveness, mood disorders, and impulsivity. People with eating disorders respond well to anti-depressants that target serotonin, thereby implying the role of serotonin in eating disorders. However, it is difficult to identify whether disturbances in neurotransmitters are causes or consequences of the disorder.

2) Socio-cultural Factors

The following are the main socio-cultural factors that can act as risk factors/ causes of eating disorder:

Media*:* All cultures recognize ideal images by which men and women are judged as worthy members of their sex. These images form an essential component of our body image, that is, how we think, feel, and behave with regard to our bodies. Media technologies (magazines, newspapers, television, movies, and now social networking websites) provide information about how an ideal body looks. Although, irrespective of one's gender, people are exposed to ideal body images in media, studies report that women are more vulnerable to body image disturbances than men. The body size of women in media is becoming unrealistically thin. Many young women are being regularly bombarded with these unrealistically thin models and actors.

If we look at the body shape and size of Bollywood actresses from 1970s and compare them to current day actresses, we would realize that the construct of ideal body for women has changed from being voluptuous to skinny. Further, use of technologies like airbrushing, digital alteration and cosmetic surgery further increase the unrealistic nature of media images of women as standards for self-evaluation. In many non-Western cultures, e.g., in earlier times in India, fatness would be valued over thinness as a sign of prosperity. Thin people were considered to be sickly and/or incompetent. However, over time after exposure to Western media, many Indian women began to express concerns with their weights and body dissatisfaction.

Activity 2: **Ethnic identity/ Nativity and Eating Behaviour**

You can find that people beonging to different parts of India vary in their typical body size, shape and weight. For instance, people from Punjab have different body type as compared topeoplefrom the North-east part of India. Similarly, people from African continent differ in their body shape from people in Western countries like America or Europe.

- Do you think there will be any difference in the way these people perceive their body shape and weightrespective to their nativity or place of origin?
- Will the socio-cultural factors like media have differential impact on them?

- Try to talk to a few such people and find out if the nativity of the person affects their perception regarding their body image and their eating behaviour.

Family Influences: About 1 out of 3 patients with anorexia report family dysfunction and it was a factor that contributed to their eating disorder (Tozzi et al., 2003). The following features were observed in families of people with anorexia: parental overprotectiveness, rigidity, marital discord, control issues etc. Parents also exceptionally value thinness, dieting and physical appearance, it is common to find family members making disparaging statements about body weight and shape. Although it is difficult to establish causality between family dysfunction and eating disorders as the direction could be other way round also. For instance, having a member with eating disorder may affect the family negatively in turn leading to increasing family dysfunction.

3) Psychological Factors

The main psychological causes of eating disorders are as follows:

Excessive focus on appearance and internalizing of thin ideal: The extent to which an individual places importance on appearance and internalization of thin ideal contributes to the development of eating disorders. Excessive focus on appearance is most predictive of a preoccupation with weight for young women who are generally more prone to anxiety. Internalization of thin ideal means the extent to which one associates thinness with desirable, attractive, popular and being happy. Internalization of thin ideal is related to a wide range of problems that are thought to be risk factors for eating disorder, i.e., body dissatisfaction, dieting, and negative affect.

Body Dissatisfaction: When one's own body image does not match with the ideal image promulgated by the media, then one is likely to develop negative feelings and perceptual biases regarding how fat one is, especially young girls and women. Such biases lead women to believe that men prefer more slender shapes than they in fact do. Also, women feel more stringently evaluated by their female peers than they themselves do. Increased body dissatisfaction is not only a diagnostic criterion for eating disorders; it is likely to cause them.

Dieting: Some researchers believe that dieting is a risk factor for eating disorders. This is because many women who developed eating disorders had a history of dieting. However, not all those who diet eventually develop an eating disorder. Some of the factors that mediate the relationship between dieting and eating disorders are body dissatisfaction, supervised diets vs. self-started diets, and the negative emotional effect of failed diets. Supervised diets in people are less likely to be linked to eating disorders than non-supervised diets by people high on body dissatisfaction. In fact, researchers conclude that controlled and supervised dieting is related to reduced symptoms of bulimia.

Negative Affect: Experience of negative affect is a causal factor for eating disorders. Feeling bad makes us self-critical and we begin to magnify our flaws and shortcomings. It is common to find wide spread negative self-evaluations like, *"I'm fat, I'm useless, I'm a failure"* in people with eating

disorders. Negative affect is what maintains binge episodes, as people usually binge when they are stressed, low, or feel bad about themselves. Eating high caloric food is comforting and helps them deal with negative affects temporarily.

Perfectionism: People with eating disorders are high on the trait of perfectionism or the need to be exactly right. Perfectionist people are much more likely to prescribe to the thin ideal and pursue a 'perfect body.' Perfectionism leads to rigid adherence to dieting that then drives the binge/ purge cycle in bulimia.

11.8 TREATMENT OF EATING DISORDERS

Psychological factors and socio-cultural aspects play a major role in contributing to the risk factors towards eating disorders. Hence focus needs tobe on the psychological treatments. Though drug treatments have also been used, however, evidence for the same is not very strong.

- **Psychological Treatment:** Initially psychotherapeutic efforts towards treatment of eating disorders aimed at patient's low self-esteem and disordered patterns of family interactions and communication. However, these treatments alone were not very effective. More recently, short-term cognitive-behavioural therapies have emphasized on targeting eating behavior and associated attitudes such as perfectionism and focus on appearance. Cognitive-behavioural therapy for bulimia teaches patient the physical consequences of binge eating and purging and the ineffectiveness of vomiting and abusing laxatives for the weight control. They are then advised to eat small portions of food 5-6 times a day with at least a 3-hour gap between each portion to eliminate excessive fasting and consequent binging. Coping strategies for resisting impulse to binge and purge and arranging activities so that the individual will not spend time alone after eating a meal, are also taught.
- **Inculcating a healthy body image in children:** It is very important to develop a positive and healthy perception of one's own body in terms of shape and weight. Accepting one's body helps one to maintain a good self esteem. Parents, family members and teachers can help inn this by avoiding criticism, comparing, or expressing dissatisfaction towards the child's body shape, size and weight. They need to reassure the child, encourage the child to respect the body for whatever it is, and convey acceptance towards the child. This will help the child in cultivating good self-esteem and positive image towards their body.
- **Relationship with food:** Food is important for us to provide nourishment and help us in our growth and development. It provides us the energy to sustain and engage in different physical and mental activities. Hence food is to be respected and valued. Developing a healthy relationship with food will help the child in changing their perception towards food and subsequently helping them to develop a healthy image of their body.
- **Drug Treatment**: There is no evidence for use of drugs in the treatment of anorexia nervosa, however, there is some evidence of

their use in bulimia nervosa, particularly the binging and purging cycle. The drugs proven to be most effective are anti-depressants, however, drugs alone have not been found to have any long-lasting effects on bulimia nervosa.

Box 11.15 Time to test your skills

1) An eating disorder in which an individual eating large amount of food in short duration of times followed by use of compensatory mechanisms to overcome the guilt of weight gain is called _____.
2) In non-purging type of bulimia nervosa, the individual uses medicines like _____ and _____.
3) People with eating disorders respond well to anti-depressants that target _____ neurotransmitter, thereby implying its role in eating disorders.
   a) Dopamine
   b) Serotonin
   c) Epinephrine
   d) GABA
4) If a person who binges or purges also meets criteria for anorexia nervosa, she/he is given the diagnosis of _____.
5) Internalization of thin ideal positively affects one's body satisfaction. True / False
6) Diathesis-stress model refers to the dynamic interaction of biological diathesis, _____ and _____.

Answer key to Box 11.15 Time to test your skills

1) Bulimia nervosa,
2) Laxatives and diuretics,
3) Serotonin,
4) Anorexia nervosa,
5) False, 6) Psychological, environmental

11.9 LET US SUM UP

Let us now list all the major points that we have learned in this Unit.

- Feeding disorders involve eating non-food substancs which can occur at any age.
- Achievement of normal body weight through regular exercise and healthy eating is beneficial for our physical and mental health. However, in some individuals the concern about body weight is somewhat more extreme, they are likely to think they are overweight even when they are not.
- Eating disorders are defined as severe disturbances in eating characterised by: (a) weight concerns; (b) body dissatisfaction; and

(c) eating problems that are more extreme than the norm causing the individual significant distress and dysfunction.

- DSM-5 classifies three major types of eating disorders: anorexia nervosa in which the individual eats minimal food and the body weight drops to dangerously low levels; bulimia nervosa is a condition in which the individual engages in episodes of binge eating (uncontrollable eating) and then indulges in self-induced ways of throwing the food out like vomiting, use of laxatives, or other attempts and; binge-eating disorder is a condition in which individuals binge repeatedly but the episodes are not followed by compensatory mechanisms to throw the body out.
- Bulimia is characterised by recurrent episodes of binging i.e. eating large amount of food- typically junk food- than most people would in the same situation followed by use of compensatory mechanisms (vomiting, excessive exercising, laxatives, dieting etc.) to overcome with the guilt over weight gain.
- The binge and purge cycle usually begins with excessive dieting, i.e. almost starving oneself motivated by a desire to look thin. Extreme diets can aggravate the associated negative emotions like anxiety and stress. While initially, a binge episode feels good, but soon enough the person starts experiencing shame and self-hatred over the loss of control.
- People with anorexia, feel hungry and often think about food but their intense dissatisfaction with their bodies drives them to almost starvation.
- DSM-5 has specified two sub-types of anorexia nervosa: the restricting type that includes individuals who diet excessively to limit the calorie intake and binging-and-purging type in which they rely on purging.
- According to the diathesis stress model, biological diathesis (genetics or neurochemical features) that leads to dysregulation in mood and eating behavior interact with psychological vulnerabilities such as low self- esteem, need to seek perfectionism, impulsivity, body dissatisfaction, and distorted body image, and environmental factors such as media based pressures, child maltreatment, family conflict, social pressures, abuse etc. leading to the development of eating disorders.
- The best course of treatment available for eating disorders is a combination of drug treatment (though not used much) and Cognitive-behavioural therapy.

11.10 KEY WORDS

Eating Disorders: Defined as severe disturbances in eating characterised by: (a) weight concerns; (b) body dissatisfaction; and (c) eating problems that are more extreme than the norm causing the individual significant distress and dysfunction.

Bulimia Nervosa: It refers to recurrent episodes of binging i.e. eating large amount of food- typically junk food- than most people would in the

same situation followed by use of compensatory mechanisms (vomiting, excessive exercising, laxatives, dieting etc.) to overcome with the guilt over weight gain.

Binge-and-purge: Binging refers to eating large amount of food in short duration which is characterized as an out-of-control experience. A typical binge episode is followed by feelings of being disgusted with oneself, depressed, or very guilty leading to 'purging' i.e. induced vomiting.

Anorexia Nervosa: An eating disorder wherein an individual is significantly under weight because of an intense fear of gaining weight or becoming fat.

Biological set-point: Our bodies have a biologically determined set point for weight that is difficult to change. Whenever we move away from this biological set point, sensation of hunger is created. The more we move away from set point, the more and more hungry we become encouraging us to eat and gain weight in order to return to the set point.

Body Dissatisfaction: The extent to which an individual negatively evaluates one's body and experiences negative feelings towards one's body's shape and size.

Internalization of thin-ideal: Thin ideal means the extent to which one associates thin with desirable, attractive, popular and being happy. Internalization of thin ideal is related to a wide range of problems that are thought to be risk factors for eating disorder i.e. body dissatisfaction, dieting, and negative affect.

11.11 UNIT END QUESTIONS

1. Explain the major types of eating disorders.
2. Describe the three types of feeding disorders.
3. Discuss the clinical features of anorexia.
4. Explain the causal factors and treatment of eating disorders.
5. Explain the binge-and-purge cycle in bulimia patients.
6. Describe some of the serious medical consequences of bulimia.

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Distorted body image in anorexia. Retrieved 3rd August, 2019, from https://www.dreamstime.com/stock-photo-anorexia-slender-mannequin-depressed-his-distorted-fat-body-shadow-image87283911.

Web Resources

- To get more information on Princess Diana's struggle with Bulimia Nervosa:

  https://www.mirror-mirror.org/princess-diana-eating-disorder.htm
- To learn more about eating disorder:

  https://www.nationaleatingdisorders.org/learn
- Watch a documentary on eating disorders to gain insight into struggles of people living with eating disorders:

  https://www.youtube.com/watch?v=gsqWHMeSIZQ
- To learn about eating disorder treatment information and resources for India:

  https://www.eatingdisorderhope.com/treatment-for-eating-disorders/international/india

UNIT 12: STRESS, TRAUMA AND PSYCHOPATHOLOGY*

Structure

12.1 LEARNING OBJECTIVES

After studying this Unit, you would be able to:

- *Develop an understanding of stress and trauma;*
- *Explain how stress and trauma are related to health and psychopathology;*
- *Identify the physiological mechanisms involved in stress;*
- *Discuss major stages of trauma;*
- *Describe the characteristics of post-traumatic stress disorder and other DSM–5 disorders related to stress and trauma; and*
- *Learn about management of stress and trauma related disorders.*

12.2 INTRODUCTION

Stress is a very commonly used term and all of us experience stress in our daily life to various extent. So it can be considered a normal part of our life. When and how does it become a matter of concern that it can create a mental health condition for the individual and needs to be treated as a disorder? Stress in its severe form can create trauma for the individual. It may be noted here that all stressors or factors that cause stress are not traumatic but all type of trauma can develop stress.

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Trauma can occur at any development phase of life and even in the womb stage also. The impact of stress and trauma can play a major role in psycho-social-emotional development of an individual which affects behavior and personality of the individual and may cause behavioral, personality related or other psychological problems/ disorders.

On the other hand some traumas are circumstantial and situational and cause anxiety, depression and suicide. It can also lead to psychological disorders such as post-traumatic stress disorder (PTSD).

In the present Unit, you will learn about stress, trauma, and the resulting psychological disorders. Further, you will know about the management of trauma and stress-related disorders.

12.3 CONCEPT OF STRESS

Any change which distracts individual from routine life or work and causes physical, emotional or psychological strain, brings excitement or depression in any form is Stress. Stress is also experienced when something sudden or unexpected happens to someone, when he/she is not prepared for the same, and it is beyond the control of the person. It is body's response to anything that requires attention or action. Sometimes it creates helplessness in the person and the person remains in the condition of stress/ tension. The person is not able to deal with the demands of the situation with the existing resources. Thus there is a gap between the available coping resources that the person has and the situational requirements.

According to National Centre for Complementary and Integrative Health, "Stress is a physical and emotional reaction that people experience as they encounter changes in life." Stress is a normal feeling. However, long-term stress may contribute to or worsen a range of physical health problems including digestive disorders, headaches, sleep disorders, and other symptoms. Stress may worsen asthma and has been linked to depression, anxiety, and other mental illnesses.

Any stimulus, internal or external, or event, which causes stress, or is the source of stress, is known as stressor. A **Stressor** disturbs the equilibrium of body and mind of an individual, and if it persists for a longer time, or if the stressor is regularly affecting the individual, even in small intensity, it may bring negative changes to one's physical and mental health. These *signs of stress* include physiological changes like rapid heart beat, changes in blood pressure, chest tightness, increased pulse rate, changes in hormonal secretion etc. There are also physical changes like muscular rigidity and pain, headaches, body ache, migraines, back pain, stomach pains, or weight gain.

There are also psychological sign and symptoms related to stress. Psychological changes include irritability, moodiness, crying, sad, lack of interest, lack of concentration etc. It increases our emotional responses and hampers our ability to think and plan. During stress the person may also develop trouble in sleeping, angry outbursts or aggressive behavior, overwhelming guilt or shame, easily startled or frightened, always being on guard for danger. The person may also start to use drugs and alcohol, or start binging on food, internet, and TV watching.

The Hungarian endocrinologist Hans Selye, who worked at the University of Montreal, is credited for coining the term stress in 1936 and has done extensive research on stress. In fact, Selye is called as the *Father of Stress research*. Selye found that the body reacts similarly to a variety of stressors including heat, cold, pain, noise, and hard work. He explained this in terms of the general adaptation syndrome (GAS).

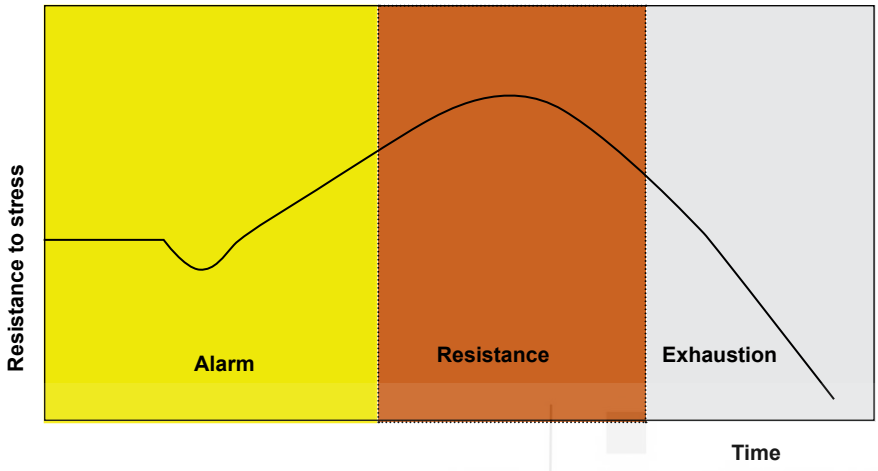

Fig. 12.1 General Adaptation Syndrome

https://commons.wikimedia.org/wiki/File:General_Adaptation_Syndrome.jpg

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The GAS consists of three stages:

- ***Alarm stage***. It is the stage marked by activation of sympathetic nervous system including physiological responses such as increased heart rate, blood pressure etc.
- ***Resistance stage***. Here the individual tries to resist the stress and adjusts to it by gathering the body's energy resources and mechanisms to fight it.
- ***Exhaustion stage.*** The body is not able to fight anymore, and the resources get exhausted. This may result in breakdown of the individual and feeling stressed. It can be noted here that the

Types of Stress

Stress can be of different types in terms of the nature, intensity and duration of stressors. For instance when there is death of a loved one, or sudden loss of job, or accident, the resultant stress is sudden and intense. It is called ***Acute stress*** which is very intense but does not last very long. On the other hand, there are ***Episodic acute stress***, which are acute but also episodic in nature, that is, they come from time to time and are repeated. For instance, office related stress that comes repeatedly with the amount of work that gets added up from time to time. In some other instances, stress may continue for longer period of time which is called ***Chronic stress*** like stress arising out of marital relationship problems, chronic health issues etc.

Ms. Alka was about to get married after a week. Everyone in family was busy in preparation, enjoying, over worked, not able to get proper sleep, specifically bride's parent and bride. Suddenly one week prior to marriage they got the news that the groom has lost his life in a car accident. Everyone was in shock. But Alka started laughing; she ran and wore her marital costume. After 2 days she slept for 12-14 hours, and as she woke up she started behaving as if nothing has happened. She asked everyone what has happened. Why everyone is looking so sad? She totally forgot that her marriage was to happen and now it has been cancelled. This is an example of Ms. Alka going through ***Acute Stress reaction****.*

Further, we have positive and negative stress depending on the nature of stress.

Positive Stress or Eustress**:** Positive stress is caused by occurrence of positive stressors in one's life. It refers to positive circumstances and situations, or events in one's life like, marriage of close family members or self, promotion in job, any social, professional, family or personal gains like winning a lottery etc., which might create stressful feelings. Positive stressors are linked with happy and positive circumstances/events, energize the individual, cause motivation and excitement in a person' life. However, they may also cause physical or mental problems/illness, by disturbing the equilibrium of body and mind, and may result in disturbances like, change in sleep and appetite, digestive problems, hyperarousal etc. If a person is not able to handle the eustress effectively, it may disturb the daily regular life and emotional regulation of the individual.

Negative Stress or Distress**:** Any stimulus or event, which causes negative stress is called negative stressor. Negative stressors are those stressors, which occur due to negative experiences in one's life. It may be very small or simple, like getting stuck in traffic when you are getting late for an important meeting in work or class in college. Or it may be severe like, loss of a loved person or object, sudden loss in financial/ social/ personal status, divorce or break up, being physically, emotionally or sexually abused, natural disasters etc. The mild negative stressors may cause physical problems like headache, problem in digestion or mild anxiety etc. But the negative stressors, which have severe impact, may lead towards trauma. Trauma may be sudden like natural disaster, accident or sudden severe illness, death of a close person; or it may be long lasting, e.g., being victim of physical or sexual violence, life-time diseases or disorders etc.

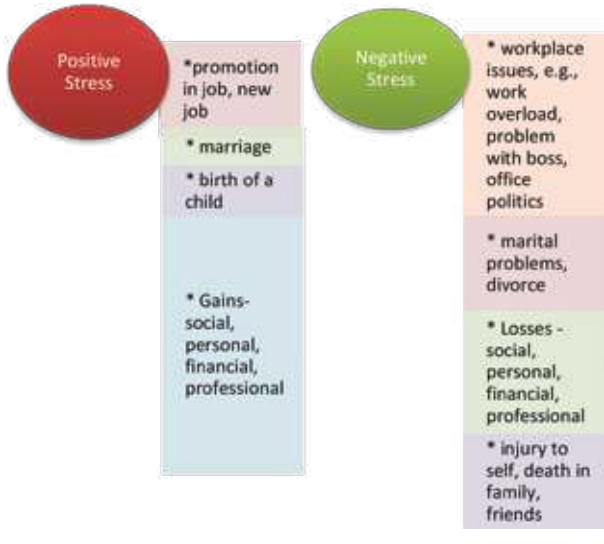

Fig. 12.2: Positive Stress and Negative Stress

Let us now understand how psychological stress is associated with psychopathology.

Psychological Stress and Psychopathology

Psychological stress occurs when we cannot control things that happen to us. It indicates a state of helplessness where things do not happen as per our desires, expectations and abilities. For instance, a natural disaster of flood might wash away your paddy field, and leave you stressed which is normal; but it will not devastate you and lead to stress disorder if you have the resources to build it again. Or you failed to get through a job interview which you needed very much. You are dejected but your psychological resources help you to cope with it. Similarly, when you moved to a new city for your education or job, you had to adjust to the new environment and new people. But you could adapt to the new situation and new place. All these examples focus on our ability to adapt to change. Lack of adaptation may result in stressful experience.

McEwen (2010) states that the **allostatic systems** in our body help us to adapt to change. Thus we have the *flight-or-fight response*, and the *tend-and-befriend response* of the body that enables to cope with the stressors. In fight-or-flight response, the person either takes up certain actions to deal with the stressor (fight) or avoids and escapes from the stress situations (flight response). In tend-and-befriend response, the person displays tending or caring behaviour and seeks social support which helps to reduce the stress. Taylor et. al. (2000) suggest that the fight-or-flight response to stressful situations is engaged more by men whereas women show more tend-and-befriend response to stressors.

When stressors are intense in nature, more frequent, and of longer duration, it increases the stress level of the individual and may lead to various psychopathologies, e.g., depression, anxiety disorders, eating disorders or substance use. It can also lead to physical health problems. Experience of trauma may lead to psychological disorders such as post-traumatic stress disorder (PTSD). However, experience of stressors may not always lead to psychological disorders as it depends on a dynamic interaction between the stressors, the individual psychological factors, and the environmental factors. The *Diathesis-stress model* explains that the genetic disposition interacts with the psychological, socio cultural and contextual factors to determine the outcome to stressors.

Self Assessment Questions 1

1. Which of these factors predict how distressing an event is for a young person ?
   a. the event
   b. the individual
   c. the supports available
   d. all of the above
2. Which of the following factors might be associated with routine stress?
   a. Experiencing sexual assault
   b. Living through a hurricane
   c. Workplace challenges
   d. Moving to a new town
3. When can routine stress become risky?
   a. It can never become risky.
   b. When it happens in the home.
   c. When it happens at the workplace.
   d. When it is not managed.
4. Positive response is also known as _____.
5. Acute stress is long-term stress. True/ False.
6. What is tend-and-befriend response?

12.4 TRAUMA: MEANING AND ORIGIN

Trauma is defined as an emotional response to a terrible event like an accident, rape, natural disaster, etc. (APA, American Psychological Association). It is a deeply distressing or disturbing psychological and emotional response to a traumatic event or experience. The individual experiences shock and denial. The trauma affects the individual's functioning in all aspects of life and has a long-term effect.

There are *three main types of trauma,*

- Acute trauma results from a single incident.
- Chronic trauma is repeated and prolonged such as domestic violence or abuse.
- Complex trauma is exposure to varied and multiple traumatic events, often of an invasive, interpersonal nature.

The origin of stress and trauma can be in the following stages:

- **Trauma during Womb stage:**

The fetus in the womb starts sensory development from the 12 weeks or third month of pregnancy. Various psychological and physiological conditions during this stage affect its development, which can have life-long impact

on the psycho-social journey of a human being. Mother's physical health condition, nutrition, injuries, medical illness, etc. affect the development of the fetus. Mother's mental health status/ condition, home environment, family interaction, marital relationship/ conflicts, etc. have potential to affect mother's emotional and psychological well-being and in turn impact the fetus development. Premature birth, and complications during childbirth are also major factors that can impact human psychological development and influence their personality development, maturity, crisis management capacity, and psycho-social-emotional development.

- **Trauma during Developmental Phases:**

Human lifespan is divided into various stages and has different characteristics at each stage. Human development is conceptualized differently by theorists, who also talk about factors that may cause disturbances in development and lead to maladjustment and mental health problems.

According to Erikson's theory of human development, different stages of life have their own developmental goals. Inability to achieve these goals results in crisis and affects negatively development of the individual. For instance, adolescence stage aims to achieve the goal of establishing an identity. Failure to do so results in identity crisis. This creates stress in the individual. If the individual is not able to adapt and cope with the stressful experience, it may lead to mental health related problems and mental disorders depending on the severity of the stressors.

Sigmund Freud has proposed five stages in child development, each stage characterized by different types of conflicts/ trauma. Resolution of these conflicts in each stage gives rise to a healthy balanced personality and smooth transition to the next stage of development. However, unresolved conflicts/ trauma at any stage of development can lead to different type of psychological problems in later life of an individual. According to Freud's theory of psychopathology, every psychological disorder has a root in an unresolved trauma/conflict during the earlier developmental stage. Though, this was highly criticized later by other researchers, but still it is relevant in understanding childhood trauma/ conflicts and their role in development of psychopathology.

The five stages of development given by Freud are briefly described as follows:

Oral Stage (0 – 1 yr.): It is characterized by getting pleasure through sucking. Careful disposition of this phase helps develop positive personality traits like trust for others, self reliance, self trust, and sharing. On the other hand crisis disposition during this phase develops pathological traits like dependent, demanding, envy/jealous, pessimism or excessive optimism and selfishness. Developmental delays, especially cognitive and language delays & reactive attachment disorder are also observed due to imbalanced disposition of this age.

Anal Stage (1 – 3 yrs.): This developmental phase starts at the age of one year and continues till 3 years. This period is known as "toilet training Period". In this period emotions like tender affection, shame, pride, guilt develops. Careful disposition with love and affection of this phase

develops personality traits like confidence, independence, decisiveness, cooperation, whereas critical and high disciplinary training in this phase leads to pathological traits like ambivalence, stubbornness, messiness, frugality, rage and in later stage in some persons it may develop Obsessive – Compulsive disorder.

Phallic Stage (3 – 5 yrs.): This developmental phase lies between 3 yrs to 5 yrs. In this age child's interest develop for parent of opposite sex as well towards genitals, boy takes their mother as love object and girls starts to mimic mother; in this age emotions like guilt, envy, insecurity, humility, confidence develops. Careful disposition of this phase develops personality traits i.e., emotional stability, creativity, constructive abilities, self competency. On the other hand individual develops pathological traits like excessive competitiveness, excessive ambitiousness, sense of shame and inadequacy if the conflicts are not resolved. In adulthood it may lead to different neurotic disorders and adjustment problems.

Latency Stage (5 – 11yrs.): Latency period starts from 5yr and ends at 11 years. In this developmental phase child develops super ego, moral and ethical values, Child learns to receive and follow systematic instructions, and steps towards social responsiveness. This stage needs to channelize the energies of the child; they also learn impulse control and ego balance, as well as skill development. Careful disposition of this stage develops personality traits like sense of industry, sense of initiative, decision making, socialization; in the absence of which individual develops pathological traits like poor impulse control, it may be over control or under control which in either way hampers the personality development; and in later stage it may develop psychological and adjustment problems.

Genital Stage (11- 19 yrs.): This is from 11 yrs to 19 yrs. This is the puberty period when biological development (change in body shape, hormonal changes and secretion) takes place and one progresses towards adulthood. It is the final stage of psycho-sexual development of human. This is the stage of onset of reflection of conflict developed in previous stages and mature sense of identity, independence, social expectations and cultural values develop. Careful disposition of this stage develops personality traits like maturity, creativeness, ego balance, productivity, meaningful goals setting, values of life and self worth and realization, sense of meaningful participation in areas of work and love. Pathological traits like identity diffusion, gender identity problems, gendered role confusions etc. may occur if the conflicts are not resolved properly. Exaggeration of complexes/ conflicts arose in previous stages may also occur leading to various problems. Personality dispositions also develop during this stage, an individual becomes extrovert or introvert; adjusted or mal-adjusted, based on the resolutions in different ways.

So in the light of different developmental phases it is clear that imbalance disposition of any developmental phase determines the person's personality traits and develop some behavorial / neurotic problems like temper tantrums, attention seeking behaviour, aggression, sibling rivalry, separation anxiety, lying, stealing, fear of school, disrespectful behaviour, maladjustment, selfishness, accusing others, violent behavior, different fears and phobias. It determines person's stress/trauma tolerance capacity as well his behavior during a stressful/ traumatic situation.

- **Life situations and circumstances:**

Life situations and circumstances can work as triggering factor for stress at any stage of life, like, change in job /residence/ school/ place; Trouble with boss/ seniors/ teachers / head of family / spouse; change in financial status (specially from higher to lower) , one's own or family member's severe illness/injury / accident. Further, break-up in a romantic relationship, separation or divorce; death of close family member/spouse/friend etc. may be the significant life events which might result into stress. Besides these, natural disasters (flood, earth quake, etc.), manmade disasters like terrorism, other disaster like fire, collapse of building, plane or train crash etc. also cause long lasting trauma in life. In other words any sudden unexpected incident which affects a person's psycho-social-emotional life in threatening or negative manner causes stress or trauma.

Thus various physical and psychosocial factors can work as precipitating factors for severe stress or trauma such as disability or disabling illnesses, social pressures, family pressures in the form of inter familial or intra familial factors, or any other unavoidable circumstances.

The **Physiological mechanisms involved in stress and trauma** are quite elaborate (see Ray, 2015, p. 277 for an overview). Our stress response is our body's response to danger. It aims to protect us from any imminent stimuli perceived to be dangerous to the self. Our body has a very comprehensive and interlinked system that helps it prepare to deal with the emergent situation and then restore the energies used later on. There are two pathways used by the brain that influences the physiological mechanisms when we are faced by a threat or challenging situation. The first is the Autonomic nervous system (ANS), which consists of sympathetic nervous system (activated in threatening situations) and parasympathetic nervous system (activated under resting situation). The second is the hypothalamus–pituitary–adrenal pathway or HPA axis. Studies indicate that underactivity or overactivity in the HPA axis is related to various psychopathologies such as anxiety, depression, autism, and schizophrenia (e.g., Lamers et. al., 2013; Roggers, Morgan, Bronson, Revello, & Bale, 2013; Walker, McMillan, & Mittal, 2005).

12.5 STRESS, TRAUMA AND PSYCHOLOGICAL DISORDERS

Trauma and stressor-related disorders are a group of emotional and behavioral problems that may result from traumatic and stressful experiences such as exposure to physical or emotional violence or pain, including abuse, neglect, family conflict etc. What happens when trauma is triggered? There is numbness, confusion, exhaustion, sadness, anxiety, agitation, dissociation, physical arousal, and blunted affect. Most responses are normal in that they affect most survivors and are socially acceptable, psychologically effective, and self-limited. However, when these are long-lasting and negatively impact the daily functioning and interaction of the person, it leads to psychological disorders, especially stress and trauma related disorders.

The key features of the trauma and stressor related disorders are the intrusive memories of the traumatic event which include (a) recurrent, unwanted distressing memories of the traumatic event, (b) re-living the traumatic event as if it were happening again (flashbacks), (c) upsetting dreams or nightmares about the traumatic event, and (d) severe emotional distress or physical reactions to anything that reminds one of the traumatic event.

Physical sign related to trauma can leave a long lasting effect as compared to the short lasting symptoms in stress conditions. These physical symptoms may include knee and joint pain, high blood pressure, diabetes, cardiac conditions, disturbed sleep, irregular menstruation cycle or increased flow during menstruation, irregular bowel syndrome, digestive system problem etc.

Psychological sign and symptoms of trauma include intense disturbing thoughts, re-experiencing trauma through flashback, repeated thoughts, nightmares, persistent feelings of fear, sadness, anger, aloofness/ detachment, uncontrolled impulse; strong negative reaction to ordinary things like loud noise, sparkling lights; excessive substance abuse, anxiety, depression, obsession, etc.

Intensity of psychological sign and symptoms varies from person to person and depends on various factor such as personality, attitude, presence or history of mental / physical illness. Psychological symptoms of trauma may increase due to presence of psychopathology or may convert in psychopathology due to traumatic experience.

Vinita has witnessed years of domestic violence between her parents. One day when two teachers in her school got into a high-pitched verbal argument, Vinita started shaking, her heart started beating rapidly, and she was having difficulty in breathing. Vinita is most likely experiencing a panic attack/ immense anxiety which is a common behavioral consequence of ***trauma****.*

DSM–5 lists three significant trauma and stress related disorders namely, Adjustment disorders, Acute Stress disorder, and Post-Traumatic Stress disorder (PTSD). A common feature of these disorders is the stress experienced by the individual, that is, there is the presence of a distressing experience. but they differ in terms of the severity of stress, nature of symptoms, duration and intensity of symptoms, and impact on daily life functioning.

12.5.1 Adjustment Disorders

Day-to-day activities and functioning require human beings to adjust to a variety of people and situations. The stressors that arise in these contexts create disturbance and distress in the individual, but they are not traumatic in nature. Most people can adjust to these stressors. However, when our reactions to these daily-life stressors are out of proportion to the severity of these, it is considered as an adjustment disorder. It affects different aspects of individual functioning such as personal, social and work performance. Here the nature of stressors is not severe and there are no specific symptoms. The diagnosis usually happens within 3 months of occurrence of the stressor and the reactions last up to 6 months only.

12.5.2 Acute Stress Disorder

Acute stress disorder, in contrast to adjustment disorder, requires specific symptoms for diagnosis and occurs in response to traumatic events. However, similar to adjustment disorder, it is a short-term reaction to traumatic events that may last from 3 days to 1 month. Thus acute stress disorder occurs in reaction to stressors that are sudden in nature and the reactions last for a shorter period of time. The traumatic stressors can include accidents, disasters both natural and man-made, abuse, rape, violence, war, terrorism etc.

12.5.3 Post-Traumatic Stress Disorder

Post-Traumatic Stress disorder (PTSD) is the most intense one with severe stress experience after a traumatic event. Like acute stress disorder, the diagnosis of PTSD requires specific symptoms, however, they last longer than 6 months. It includes the following five main clinical symptoms:

- ***Exposure*** *to severe stress leading to aversive experiences*
- ***Intrusions*** *related to the traumatic event occurs through flashback of the trauma experience, nightmares, distressing memories related to the event, and distressing physiological reactions while remembering the event*
- ***Avoiding*** *any stimuli, for instance people, places, objects etc. that remind the traumatic event.*
- *Increased* ***arousal*** *and reactivity such as angry outbursts, irritability, being extreme sensitive and vigilant, easily startled, reckless behavior, disturbances in sleep, and problems with concentration.*
- ***Alterations*** *in cognition and mood leads to inability to remember important aspects of the traumatic event, negative thoughts and feelings leading to ongoing and distorted beliefs about oneself or others (e.g., "I am bad," "No one can be trusted"); distorted thoughts about the cause or consequences of the event leading to wrongly blaming self or other; ongoing fear, horror, anger, guilt or shame; much less interest in activities previously enjoyed; feeling detached or estranged from others; or being unable to experience positive emotions (avoidance of happiness or satisfaction).*

PTSD results from an experienced threat that produces intense fear, helplessness, or horror (M.Friedman, Keane, &Resick, 2014; Shalev, Liberzon, &Marmar, 2017; VermettenLanius, 2012). However, not all traumatic experiences result in post traumatic stress disorder. Factors that may increase the likelihood of PTSD include,

- Experiencing intense or long-lasting trauma
- Having experienced other trauma earlier in life, such as childhood abuse
- Having a job that increases your risk of being exposed to traumatic events, such as military personnel and first responders
- Having other mental health problems, such as anxiety or depression

- Having problems with substance misuse, such as excess drinking or drug use
- Lacking a good support system of family and friends
- Having family history of mental health problems, including anxiety or depression

A young girl of 17 years reported to a clinic with the problems of having interpersonal and trust issues, specially when talking to boys. She appeared to be hyper vigilant, cannot tolerate even slightest of touch, was fearful of going alone and of dark places. Mother reported that she cannot sleep alone in a room and have frequent nightmares. Detailed interview and psychological assessment carried by a mental health professional revealed that she was sexually abused when she was a child of 5-6 years by a close relative, and she could not reveal it to anyone in the family. This is an example of ***post-traumatic stress disorder****.*

Self Assessment Questions 2

1. Specify whether the statements given below are **True or False.**
   a) PTSD is preventable.
   b) Most people who have lived through crisis events develop PTSD.
   c) The term 'hypervigilance' means excessive watch for threats or danger.
2. Adjustment Disorder is only diagnosed when-
   a. The symptoms aren't better understood with another mental health diagnosis
   b. When a natural disaster is involved
   c. When the individual is a military veteran
   d. When depression is unresolved
3. Which of the following is NOT an intrusion symptom of PTSD?
   a. Inability to keep negative memories from occurring
   b. Flashbacks
   c. Depressed mood
   d. Prolonged distressed reaction to a trigger of the traumatic event
4. Which of the following is NOT a potential cause of posttraumatic stress disorder?
   a. A horror movie
   b. Military combat
   c. Rape
   d. Hurricane
5. Which of the following is not a symptom associated with PTSD
   a. Hypervigilance

b. Re-experiencing

c. Avoidance

d. Hallucinations

6. Which of these is NOT a symptom of acute stress disorder?

a. Feeling numb

b. Feeling anxious

c. Feeling hyperactive

d. Feeling like you're in a daze

12.6 MANAGEMENT OF STRESS AND TRAUMA RELATED DISORDERS

Since stress is a most common experience of life, management of it needs to focus on knowing about the nature of stress, building inner psychological resources that enable one to deal with stress effectively, and understanding the mind-body connection in determining our stress experiences.

It is not possible to avoid stressors in life, but for keeping oneself fit, one should practice various methods to manage stress such as,

- Developing self-awareness
- Learning about effective coping resources
- Acquiring emotion-regulation skills
- Engaging in relaxation exercises

One of the effective technique used for dealing with stress is the ***Stress Inoculation Training***. Like we inoculate ourselves against infections and diseases, this technique helps us to inoculate ourselves against stress.

Developed by Donald Meichenbaum, stress inoculation technique is a therapeutic intervention that can be given to people at risk for stress. It prepares them for stressful circumstances and events, and help them deal with stress-inducing situations with minimal distress.

It has three phases:

(a) conceptualization: involves identifying and clarifying the nature of the person's stress and educating them about the nature and effects of stress, and how stress inoculation works;

(b) skills acquisition: here the person learns a series of skills for dealing with stressful situations; and

(c) rehearsal and application: here the person puts into practice what they have learned.

Stress Inoculation technique is often used in conjunction with other cognitive-behavioural therapies and techniques.

Some Tips for Developing Emotional Well-Being to Manage Stress

- Sit in a calm & quite space, close your eyes & introspect.
- Introspect your day activities, a particular event, your actions and reactions.

- Give message to yourself by speaking loudly, "What I cannot change – people around me, my circumstances, my situation, environment; What I can change - "Myself".
- Accept the circumstances, environment & people around you & yourself as it is.
- Don't try to change, try to highlight the positive points in the above mentioned.
- Develop the attitude of gratitude.
- Develop forgiveness (forgiveness does not mean to forget, rather learn a lesson and move on)
- Make positive affirmations and speak them daily 3 times a day.
- Be altruistic and contribute to other's well-being.

Management of trauma and PTSD

Although drug treatments are used for PTSD (Davidson et. al., 2006), the most effective line of treatment for PTSD involves psychotherapies. The main focus of the treatment is to help the person to process the memories of the trauma so that catharsis is achieved and acceptance is developed.

Debriefing

Debriefing is a set of procedures (technique) that provide emotional and psychological support to the person immediately after experiencing a traumatic event. The person is encouraged to narrate the traumatic events in a supportive environment. The main goal of debriefing is to prevent post traumatic stress disorder and other negative consequences.

Cognitive Behaviour Therapy

The main focus of the cognitive behavior therapy is to identify the unhelpful cognitions or thoughts, question their validity and usefulness, create alternate helpful thoughts, and practice these through behavior change. It involves various cognitive and behavioural techniques to modify the negative or faulty cognitions and replace them with positive and realistic thoughts. Thus there is identification of the negative automatic thoughts of the person, reality testing of these thoughts, adoption of new helpful thoughts, and monitoring the implementation of these modified thoughts. It involves homework assignment, activity scheduling and behavioural rehearsal to actually practice these newly learned helpful cognitions.

Eye Movement Desensitization and Reprocessing

Eye Movement Desensitization and Reprocessing (EMDR) is a form of psychotherapy in which the person being treated is asked to recall the distressing or traumatic memories. The therapist then directs the patient in one type of bilateral stimulation, such as side-to-side eye movement or tapping either side of the body. This therapy developed by Shapiro is based on the idea that negative thoughts, feelings and behaviours are the result of unprocessed memories. This process helps the person to process the traumatic memories.

Supportive Therapy

Person affected by trauma needs family and social support. Supportive psychotherapy aims at providing the necessary psycho-social Support to the individual. It uses warmth, friendly and supportive manner without evoking undue shame or dependency. Body language and communication skills, (both verbal and nonverbal) of the therapist play a major role in helping the patient release their intense traumatic emotions.

Relaxation Techniques

Various muscular relaxation techniques, deep breathing, breathing exercises are powerful tool to treat PTSD. Some methods of relaxation techniques are:

Jacobson Progressive Muscular Relaxation (JPMR)

This is based on the mind-body connection. Dr. Edmund in 1920 observed that relaxing the muscles could relax the mind as well. He applied the JPMR technique on his patients suffering from anxiety. The technique involves tightening one particular muscle group and then releasing the tension. The same is repeated with each and every muscle group in a sequential way. This helps you to gradually relax the whole body.

Yoga and Meditation

Different yoga techniques including yoga breathing exercises of pranayama, deep breathing, yog nidra, guided meditation can help one to relax whole body and mind.

12.7 LET US SUM UP

In the present unit, you learned about a ubiquitous phenomenon of stress in our life. The concept of stress was explained with a focus on its signs and symptoms, and types. Trauma indicates the severity of stress and may lead to different stress related disorders including post traumatic stress disorder. The categories of stress related disorders as included in DSM 5 were described including the post traumatic stress disorder. Finally, management of stress, and post traumatic stress disorder was described.

12.8 KEY WORDS

Stress results when the person is not able to deal with the demands of the situation with the existing resources and it results in physical and emotional reactions.

Stressor is the source of stress.

Acute stress is very intense occurring after a traumatic situation, but does not last very long.

Allostatic systems help our body to adapt to change in stressful situations.

Diathesis-stress model explains stress in terms of dynamic interaction between hereditary and environmental factors.

Trauma is defined as an emotional response to a terrible event like an accident, rape, natural disaster, etc. and is deeply distressing.

Adjustment disorder occurs when our reactions to daily-life stressors are out of proportion to the severity of these.

Acute stress disorder occurs in reaction to stressors that are sudden in nature and the reactions last for a shorter period of time.

Post-Traumatic Stress disorder (PTSD) occurs when there is severe stress experience after a traumatic event characterized by intrusion of traumatic experiences through flashback and nightmares.

Stress inoculation technique is a therapeutic intervention that prepares people at risk for stress to deal with stress-inducing situations with minimal distress.

Cognitive behavior therapy involves identification of negative automatic thoughts of the person, reality testing of these thoughts, and adoption of new helpful thoughts.

Eye Movement Desensitization and Reprocessing (EMDR) is a form of psychotherapy in which the person being treated is asked to recall the distressing or traumatic memories under bilateral stimulation.

12.9 ANSWERS TO SELF ASSESSMENT QUESTIONS

Answers to Self Assessment Questions 1

1. (d); 2. (c); 3. (d); 4. Eustress; 5. False
6. Tend-and-befriend response refers to the person displaying tending or caring behaviour and seeking social support which helps to reduce the stress.

Answers to Self Assessment Questions 2

1. (a) False (b) False (c) True
2. (a) 3. (c) 4. (a)
5. (d) 6. (c)

12.10 UNIT END QUESTIONS

1. Explain General adaptation syndrome.
2. How are stress and trauma are related?
3. Explain the major psycho-social factors that can be stressful.
4. How stress and trauma are related to psychopathology?
5. What are the key features of stress and trauma related disorders?
6. Which are the major psychological disorders which result due to stress and trauma?
7. What are different types of psychological therapies used to treat PTSD?

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