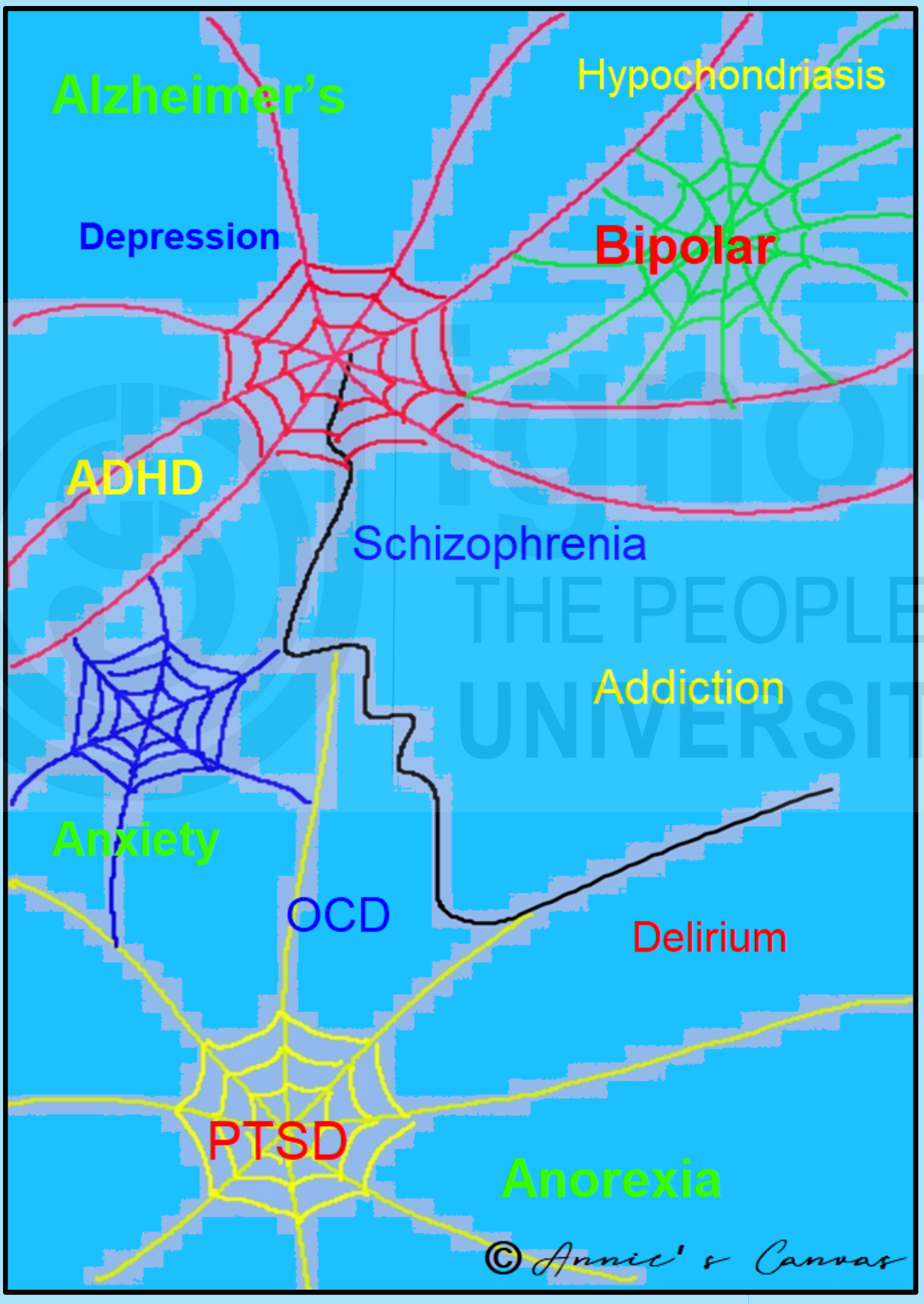
Indira Gandhi National Open University
School of Social Sciences

BPCC 133
PSYCHOLOGICAL DISORDERS



BPCC-133

PSYCHOLOGICAL DISORDERS

School of Social Sciences
Indira Gandhi National Open University

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Unit 2	Disorders of Anxiety, Panic, Fear and Obsessions-I	Dr. Gulgoona Jamal, Assistant Professor, Zakhir Hussain College, University of Delhi
Unit 3	Disorders of Anxiety, Panic, Fear and Obsessions-II	Dr. Gulgoona Jamal, Assistant Professor, Zakhir Hussain College, University of Delhi
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Unit 11	Substance-Related Disorders and Behavioral Addictions	Dr, Itisha Nagar, Assistant Professor, Kamala Nehru College, University of Delhi.
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Contents

PSYCHOLOGICAL DISORDERS: HOW TO PROCEED IN THE COURSE?

The course on "Psychological Disorders" (BPCC-133) is the third core course offered in 3rd Semester of BA General Programme, under Bachelors Degree Programme of IGNOU. The course is of 06 Credits, comprising Theory (04 Credits) and Tutorials (02 Credits). The course is divided into four blocks. Each of these blocks represents a specific theme which is discussed in three to four units. The units are arranged in a logical sequence so as to cover the main aspects of each theme. Each unit contains a brief introduction in the beginning and a list of references and further readings, as well as, web resources at the end. The list of online resources has been mentioned especially, since many of you must be having internet access. Therefore, for additional information on various topics, you may access the web-links. You are advised to read Course Introduction carefully, in order to know about the rationale and content of the course you have offered to read.

You have in your hands, all the four blocks and fifteen units of this course. Before proceeding to read the units, you are advised to go through instructions about how to read the course material. Given below is the explanation of the organization and sequencing of the unit. We will tell you what is contained in various sections of a unit, and how you should go about completing different tasks involved while reading the course material.

Organization and Sequencing of a Unit

The unit starts with:

1.0 Learning Objectives
1.1 Introduction
1.2 Section (Theme of the section)
    1.2.1 Subsection of 1
    …….
    Check Your Progress
1.3 Section (Theme of the section)
    1.3.1 Subsection of 2
    …….
    Check Your Progress

The numbering and length of each section and subsections may vary from one unit to the other unit, depending upon the depth of information in each unit. The last four sections in each unit with the following headings are also numbered. They are as follows:

- Review Questions
- References and Further Reading
- References for Images
- Web Resources

As the scheme suggests, each unit is divided into sections for easy reading and better comprehension. Each section is indicated by **BOLD CAPITALS** and each

subsection by a **relatively smaller but bold typeface**. Divisions within the subsections are in **relatively smaller bold typeface** so as to make it easy for you to understand.

Let us now discuss each section of a unit.

Learning Objectives

We begin each unit with the section Learning Objectives. It tells you briefly what we expect from you once you complete working on the unit.

Introduction

In the section Introduction, we specify,

a) The relationship of the present unit to the previous unit.

b) The theme of the present unit

c) The order of presentation of all the sections in the unit from Introduction to Summary

Summary

This section of each unit under the heading Summary, presents the whole unit for the purpose of ready reference and recapitulation.

Box

Sometimes certain topics may deal with abstract ideas and related concepts, as well as some case studies. Thus, it becomes necessary to explain these related concepts in a separate enclosure, which is called Box, in our units. This is added information which is necessary to comprehend the main text. These boxes may include (i) explanatory notes regarding concepts, (ii) information about main works of scientists/psychologists who have contributed to a particular topic, (iii) certain case-studies that are related to the concepts being discussed, etc.

Illustration

There are several illustrations in each unit in the form of pictures, figures, diagrams and images. The main purpose of these illustrations is to make the study comprehensive and interesting.

Case Study

In many of the Units, disorders have been explained with the help of Case studies. The case studies are integrated in the content and highlight the important features of the disorders. With the case studies, you will become aware of how the disorders affect one's day to day functioning and the surroundings. Case studies will also help you to understand that psychological disorders may occur in people across diverse backgrounds.

Check Your Progress

We have given self-check exercises under the caption Check Your Progress at the end of main sections. To answer the Check Your Progress questions, you should,

a) Write your answers using the space given below each question

b) Label the diagrams in the space provided (if any).

You will be tempted to have a glance of the main text as soon as you come across an exercise. But we do hope that you will resist this temptation and turn to the main text only after completing the answers.

You should read each unit and note the important points in the margin provided in the course material. This will help in your study. It will also help you to answer the self-check exercises and the assignment questions, as well as help in revising your course before appearing for your Term End Examination.

Key Words

Each unit has key words at the end of the unit, to explain the basic ideas, technical terms and difficult words.

References and Further Reading

We have given a list of references at the end of each unit. This is a list of books and articles used by the course writers to prepare the units. This reflects that your course material is based on a wide spectrum of literature available on a particular theme, related to your course. This also informs you of the wide literature available in the particular area of study. If interested in widening your knowledge, you may look for the mentioned references. Each reference mentions the name of the author, year of publication, title of the book/article, name of publisher and place of publication.

Further readings help you to increase your level of understanding of a particular theme in each unit, though it is not a compulsory reading.

References for Images

The URL for the figures has been mentioned for the sources of images and pictures in the unit. If interested, you may also look for the mentioned references.

Web Resources

We have given a list of online references, on various topics, in each unit. Apart from the text material, if you are interested in learning more about the topic, then you may access the website as mentioned, for a particular topic.

Review Questions

Besides Check Your Progress, we have given Review Questions after summary section in each unit. You may practice these questions which will help you in answering assignments and Term End Examination Question Paper, though the pattern and style of questions asked may not be similar.

Audio and Video Aids

Some Units have been selected for the audio and video programmes to supplement the printed material. This will help you to understand the units with greater clarity.

Apart from this, you may also access IGNOU's FM radio channel, Gyanvani (105.6 FM) which is available across many cities in India, for regular programmes, related to themes on Psychology. You can listen to the live discussions by faculty and experts on the topic of the day and interact with them through telephone, email, and through chat mode.

You may also watch Gyandarshan TV channel (free to air educational channel), for programmes related to topics on Psychology. The schedule of Gyanvani and Gyandarshan is displayed on www.ignou.ac.in. The radio and TV channels may also be accessed on Gyandhara, webcast facility for Gyanvani and Gyandarshan, provided by the University.

Tutorials

The course on Psychological Disorders will include tutorials. The tutorial activities will be given as a separate activity in the assignment. It is a compulsory activity that is of 02 Credits and will evaluated by the academic counsellor separately. The tutorial activity will be an interface of real cases that will help you develop an understanding about psychopathology.

Assignments

You will receive a set of assignments for the whole course. These are Tutor Marked Assignments, which are to be submitted to the respective Study Centre after completion. These assignments will be evaluated by academic counsellor from your Study Centre. Ensure that you complete all your assignments because the grades that you get in each of these assignments are included in the final evaluation of your degree. Before answering the assignments, read all the units carefully. While working on the assignments, kindly ensure the following points,

1) Clearly write your enrollment number
2) Answer them in your handwriting and in your own words
3) Write clearly and neatly so that it is easy to read your answers
4) Leave margins on one side of your answer-sheets so that evaluator may write his/ her comments on your performance
5) You will submit the assignments at your Study Centre on or before the date mentioned as per the admission cycle. Kindly check the dates from www.ignou.ac.in or your Regional Centre website.
6) You may also visit the University website for updates related to assignments.

Term End Examination

After reading and understanding the course material, as well as referring to the audio and video programmes, you will be writing the Term End Examination (TEE) for the course. Kindly consider the following points while answering for TEE.

1) Questions should be replied in one's own words and should be coherently organized..
2) Answer questions keeping in mind the word limit.

Preparation of Course Material

The syllabus of course material BPCC-133 is designed by an Expert Committee (see page 2 of this course) and prepared by Course Preparation Team which comprises the author(s) of units, content editor(s), language editor, and the course coordinator. The expert committee selected the themes and sub-themes of the blocks and units, keeping in view the prescribed syllabi of UGC (CBCS model).The authors of units have provided their expertise in elaborating them in the form of the main text of each unit. The content editor has carefully examined the course contents and has made an attempt to make the material clear and comprehendible.

For any query or feedback related to the course, you may contact the Course Coordinator at,

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COURSE INTRODUCTION: PSYCHOLOGICAL DISORDERS

You must have observed that people often label behavior as 'mad', 'crazy', or 'insane' if the behavior deviates from the prevailing societal norms. You must be curious to know about such aspects of human behaviour. We are all intrigued and want to know the answers of why people indulge in violent behaviour, drugs, or sexually perverted behaviour and such other abnormal patterns of behaviour. From ancient to the present times, the criteria to diagnose mental disorder has also witnessed many changes. Mental illness as a non-communicable diseases (NCD) is a major burden on health and well-being. Initially, NCD included the 'Big Four', namely, cardiovascular diseases, Type 2 diabetes, cancer and chronic respiratory diseases. Later on, 'mental health' was included under the umbrella of NCD. According to World Health Organisation (WHO), 'No health without mental health', thus, emphasized on the awareness and promotion of mental health and prevention of mental illness.The Sustainable Development Goals 3 (SDG 3) of WHO, out of 17 SDG, focuses on 'physical, mental and social well-being for all at all ages'. The importance of mental health has been recognised globally. Presently, the countries are committed in the "prevention and treatment of non-communicable diseases including behavioural, developmental, neurocognitive disorders, which constitute a major challenge for sustainable development" (SDG, WHO).

The course on 'Psychological Disorders' will provide you an overview of mental disorders that come under the domain of abnormal psychology. The study of mental health problems is also known as *psychopathology*. The course highlights the nature of psychological disorders, classification criteria, with its history and scientific underpinnings. Each Unit includes the clinical picture, causal factors, and treatment of a particular disorder being discussed. How the disorders are maintained, and what effect they have on people's lives is also presented. The course content also includes case studies, and examples so as to develop an understanding of disorders.

BLOCK INTRODUCTION

There are four blocks in this course. Block 1 covers spsychological disorders, the classification criteria and primarily the anxiety disorders according to DSM-5 criteria. Block 2 focuses on mood disorders, various form of psychoses, somatic symptoms disorders and eating disorders. Block 3 explains personality disorders as categorised under Cluster A, B and C, followed by paraphilic disorders, and substance use disorders as defined by DSM-5. Disorders related to children and adolescents, disorders related to trauma and stressors and neurocognitive disorders are discussed in Block 4. Now let us see the content as covered in each block.

Block 1 introduces you to psychological disorders and anxiety disorders. Unit 1 explains the history of psychological disorders, its classification criteria and causal factors. The models to explain psychopathology and ethical concerns are also discussed in the Unit.

Unit 2 and Unit 3 cover disorders of anxiety, fear, and obsessions. It also explains the distinction between panic, fear, and anxiety. The diagnostic criteria, causal factors and treatment of related disorders according to DSM-5, are discussed.

Block 2 consists of four Units. Unit 4 focuses on mood disorders. The types of unipolar and bipolar disorders are explained in this unit. Their causal factors, prevalence and treatment are also discussed. The unit also covers suicide and suicidal ideation.

Unit 5 gives a description on schizophrenia spectrum disorders. The unit presents an overview of positive and negative symptoms, types of psychotic disorders, biological, psychological and socio-cultural causes of the disorder. The unit also briefly discusses the treatment of psychosis.

Unit 6 highlights somatic symptoms and related disorders.The clinical picture, causal factors and treatment of illness anxiety disorder, factititious disorder and conversion disorder are discussed**.** Distinction between conversion disorder, factitious disorder, and malingering (faking) is also explained.

Unit 7 introduces eating disorders, namely bulimia nervosa, and anorexia nervosa. Their clinical features, probable causes and treatment options are discussed.

Block 3 consists of four units. Unit 8 introduces you to an important group of disorders, namely personality disorders. In this unit, Cluster A: schizoid, paranoid and schizotypal personality disorders are discussed with their clinical features, causes and treatment.

In a similar way, in Unit 9, Cluster B and C personality disorders are explained. Unit 10 introduces to the paraphilic disorders and sexual dysfunctions. Concepts like normal sexuality, gender differences in sexuality, and sexual response cycle are explained. The sexual disorders and dysfunctions as mentioned in DSM-5 have been discussed. We then move to discuss their etiology and treatment modalities. An overview of gender dysphoria and transsexualism is also presented.

Unit 11 explains substance use and related disorders. The changes in the classification from DSM IV are also discussed. The unit explains the differences between substance use, abuse and dependency. Explanation of etiology and the physical and psychological effects of substance use disorders are addressed. Gambling disorder, a recent entry in DSM-5, has also been discussed briefly.

Block 4 consists of four units. Unit 12 and Unit 13 give a description of childhood and adolescent psychological disorders. Developmental psychopathology is discussed in Unit 12. The main disorders described are childhood depression, oppositional defiant disorder/conduct disorder and attention deficit/hyperactivity disorders. Neurodevelopmental disorders like, intellectual disability, autism spectrum disorder and specific learning disorders are discussed in Unit 13.

Unit 14 discusses the nature of neurocognitive disorders. Major neurocognitive disorders, delirium, and amnestic disorders are explained. The unit also covers the causal factors and treatment of neurocognitive disorders.

Lastly, Unit 15 will introduce you to trauma and stressor related disorders. The unit will explain the concepts of stress, stressors, and association of stress to mental and physical health. Disorders like adjustment disorder, acute stress disorder and posttraumatic stress disorder will be discussed. The unit will also highlight the significance and objectives of crisis intervention for trauma related disorders.

BLOCK 1

INTRODUCTION TO PSYCHOLOGICAL DISORDERS AND DISORDERS OF ANXIETY AND OBSESSIONS

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UNIT 1 WHAT IS A PSYCHOLOGICAL DISORDER? *

Structure

Learning Objectives

After reading this Unit, you will be able to:

- Explain the meaning and nature of psychological disorders
- Discuss the clinical presentation, causal factors, and treatment of psychological disorders;
- Summarize the classification of psychological disorders;
- Explain the meaning of abnormal behaviour; and
- Elucidate the methods and techniques used in assessment of psychological disorders.

1.0 INTRODUCTION

Psychological disorders are fairly common. This should not surprise you. When we speak about health, it encompasses both physical and mental health. However, invariably, our attention is drawn primarily towards physical problems and diseases. Psychological disorders or psychopathology, have certain symptoms, etiology (how it occurs), the conditions in which it is maintained, and effect on day-to -day functioning of the individual. Psychological disorder may develop in anyone, irrespective of age, gender, ethnicity, region, and other such factors. It affects the people surrounding the person who has a psychological disorder. At times, people experience more than one disorder at the same time (comorbidity).

Psychological problems are on the rise not only in India, but across the world. Observing the frequency, and widespread suffering that the disorder causes, it

* Dr. Gulgoona Jamal, Assistant Professor, Zakhir Hussain College, University of Delhi, New delhi

becomes pertinent to understand its nature. To start with this, in the present Unit, history, classification, and criteria of psychological disorders will be discussed, followed by the causal factors and assessment of psychological disorders.

1.1 WHAT IS A PSYCHOLOGICAL DISORDER?

According to Barlow and Durand (2008), psychological disorder is a ***psychological dysfunction*** within an individual that is associated with ***distress or impairment in functioning*** and a response that is not ***typical or culturally expected***. Let us examine the three criteria enlisted in this definition of a psychological disorder:

Psychological dysfunction in the definition refers to breakdown in cognitive, emotional, or behavioral functioning. For example, you are out in a market for shopping, but instead of enjoying it, you experience severe fear all the time and just want to rush back home, even though there is nothing to be afraid of, and this happens every time when you go to the market. However, if there was a bomb scare or a riot erupted in that market in the recent past, then it would not be dysfunctional for you to be fearful and avoid that market for some time. Many people may experience a mild version of a fearful reaction without meeting the criteria for a disorder. To draw the line between normal and abnormal dysfunction is often difficult. Hence, these problems are often considered to be on a continuum or a dimension, rather than as categories that are either present or absent. Thus, having a dysfunction is not enough to meet the criteria for a psychological disorder.

Distress or impairment in functioning seems to be an important and clearly defined component. However, it is often quite normal to be distressed (e.g., death of a loved one). There are certain disorders which do not lead to personal distress e.g., mania, in which the patient feels elated and enjoys it so much that he/she avoids treatment but nonetheless is still in a dysfunctional state.The concept of impairment is useful though not entirely satisfactory, e.g., a person may consider him/herself shy, but it does not mean he/she is abnormal unless they are unable to interact with people and make friends. This again illustrates that most psychological disorders are extreme expressions of normal emotions, behaviors, and/or cognitive processes.

A typical or not culturally expected is an important but insufficient criterion to determine abnormality. At times, things are considered abnormal because they occur infrequently and deviates from the average. The greater the deviation, the more abnormal it is. However, not all kinds of deviation can be considered as disorders, e.g., artists usually deviate from normal, but instead of being identified as disordered, they are called talented and with unusual thinking. Not only such people are well paid, but they enjoy their careers as well. The society accepts such unusual thinking.

In addition to the above, some other criteria are:

Violation of social norms is considered to be abnormal. This definition is very useful in understanding the cultural differences in psychological disorders, e.g., to enter a trance state or to believe that one is possessed, reflects a psychological disorder in western cultures but not in many other cultures where it is expected and accepted (Sapolsky, 2002). However, violation of social norms as a criterion has been misused, e.g., political dissidents are often committed to mental institutions, for example, during dictatorship in former Soviet Union.

Statistical infrequency as defined by Davison, Neale and Kring (2004) is a criterion for abnormal behavior. The normal curve places most people in the middle as far as any characteristic is concerned and very few people fall at either extreme. Statistical infrequency is used explicitly in diagnosing intellectual disabilities.

Wakefield (1992, 1999) proposed **abnormal behavior as a harmful dysfunction**. This definition has two parts: harmful and dysfunction. Harmful is a value judgement whereas dysfunction is an objective, scientific component. To judge a behavior as harmful requires some standard which is likely to depend on sociocultural values. Dysfunction occurs when an internal mechanism is unable to perform the function for which it was designed by evolution. The problem with Wakefield's definition is that while in medicine, dysfunctions can be identified in a rather straightforward manner, e.g., clogged arteries cause cardiovascular disease. However, in case of mental disorders, mental or biological mechanisms that are not functioning properly are largely unknown, e.g., schizophrenia is caused due to excessive secretion of dopamine or lack of postsynaptic receptors is still being investigated.

Thus, no single criterion provides a satisfactory definition of abnormal behavior. However, together the criteria provided a framework initially, to define abnormality. Variants of these approaches are most often used in current diagnostic practice and is outlined in DSM-5 (American Psychiatric Association, 2013). DSM-5 defines ***psychological disorder as the behavioral, emotional, or cognitive dysfunctions that are unexpected in their cultural context and associated with personal distress or substantial impairment in functioning.***

Check Your Progress 1

1) Define psychological disorder.

.....

.....

.....

2) What are the components of a psychological disorder?

.....

.....

.....

1.2 HISTORY OF PSYCHOLOGICAL DISORDERS

In this section, we highlight some views on psycological disorders from a historical perspective

Ancient views of psychological disorders

Over the centuries, human efforts to explain abnormal behavior have ranged from demonology, magic, theology, physiology to psychology. The earliest evidence that attempts to understand abnormal behavior, comes from **Egyptian Papyri**, sixteenth century BCE (Oshaka &Oshaka, 2000), which shows that the brain was recognized as the site of mental functions. Diseases with unknown

causes were treated with in cantations and magic. In ancient civilizations of China, Greece, and Egypt, abnormal behavior was attributed to possession by God or demons depending on the symptoms. If the behavior was religious, the person was thought to be possessed by God, but if the behavior was aggressive, bizarre, or overexcited then the person was thought to be possessed by demons. The possessed individuals were treated through *exorcism* (driving out an evil spirit from a person or a place).

Later in Greece, medical perspective was used to understand mental disorders and their treatment under the leadership of **Pericles (461-429 BCE).** This period also saw the rise of 'Father of modern medicine'**Hippocrates,** the Greek physician, who rejected demonology and instead suggested that just like physical illnesses, mental illnesses are also caused by natural processes such as brain pathology and require appropriate treatment. He saw brain as the central organ of intellectual activity, identified the role of heredity, and head injuries as a cause of mental and sensory disorders. He also gave the famous classification of mental disorders into three categories: **mania, melancholia, and phrenitis** (brain fever). He classified personalities based on four humors, blood, phlegm, black and yellow bile, in the human beings (Maher & Maher, 1994).

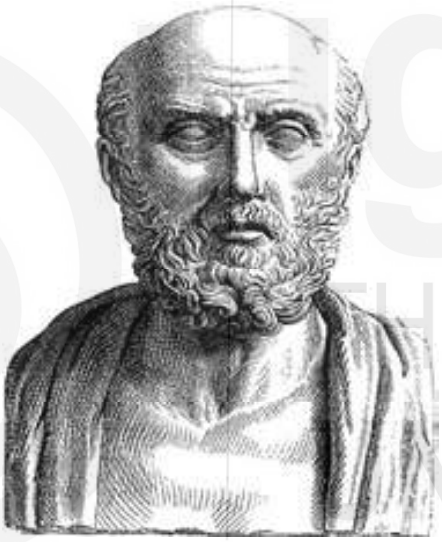

Fig. 1.0: Hippocrates of Kos (Father of Medicine)

Source: https://en.wikipedia.org/wiki/Hippocrates

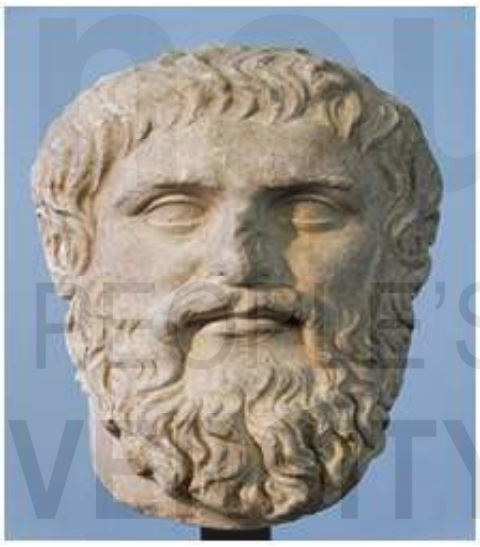

Fig.1.1: Plato

Source: https://en.wikipedia.org/wiki/Plato

The Greek philosopher **Plato (429–347 BCE)** took a philosophical view of mentally disturbed individuals and suggested that they are not responsible for the criminal acts committed by them and hence should not be given punishment like the common people. He suggested that mentally disturbed individuals should be kept in hospitals run by society. His famous book, *The Republic,* underscores the importance of individual differences in mental and physical abilities and role of sociocultural factors in thinking and behavior. Though Plato had a modern outlook, he believed that mental disorders are also partly caused by divine factors. **Aristotle (384-322 BCE)** who was a disciple of Plato has written extensively about mental disorders and consciousness. He rejected the psychological factors like emotions and cognitions as causes of mental disorders and accepted Hippocrates' biological views on mental disorders. Hippocrates' work was supported by some of the later Greek and Roman physicians such as the most

influential Greek physician, **Galen (130-200 CE).** He did anatomical studies of the nervous system in animals (human autopsies were not allowed till then). He also divided the causes of psychological disorders into physical and mental categories.

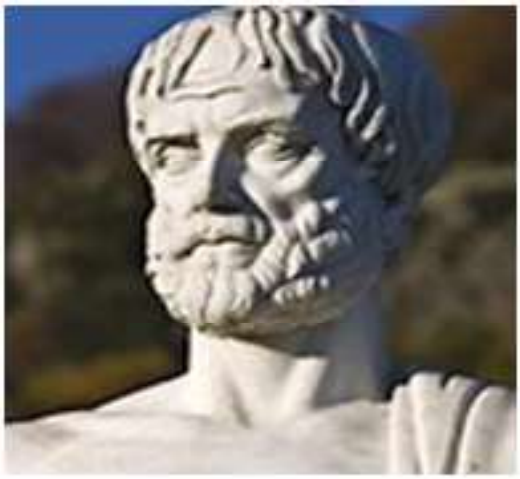

Fig.1.2: Aristotle
Source:https://en.wikipedia.org/wiki/Aristotle

Fig. 1.3: Galen
Source:https://en.wikipedia.org/wiki/Galen

China was one of the earliest developed civilizations to provide medical attention to mental disorders (Soong, 2006). Chinese medicine took a natural than a supernatural view of mental disorders. It was based on the premise that mental disorders occur because of disbalance of yin and yang (positive and negative forces) and treatment involved restoring the balance between yin and yang (Tseng, 1973).

Ancient Indian texts give description about mental disorders. In *Ayurveda* (Science of Life), personality types and temperament depend on the humor, systemic and mental perspectives. There are three humors - *vata* (ether), *pitta* (bile), and *kaph* (phlegm). Based on this classification, there are seven personality subtypes. There are five other basic elemental subtypes and eight systemic subtypes of personality that are the basis of all physical and mental disorders (Dwivedi, 2002). *Atharveda* classifies mental disorders of both mild and severe in nature. *Charaka Samhita* and *Sushruta Samhita* also give a detailed description about diseases that include mental disorders.

Psychological disorders in the middle ages

During the Middle Ages (about 500 to 1500 CE), when Europe was immersed in darkness and the scientific knowledge developed by Greek philosophers, was pushed into oblivion, Islamic countries of West Asia protected Greek medicine and furthered its research and knowledge. In Persia, **Avicenna (980-1037 CE),** referred as the "Prince of Physicians" wrote the most widely referred work in the world titled, *"The Canon of Medicine"*. In Baghdad in 792 CE, the first mental hospital was established. In contrast to this progressive attitude, Europe was devoid of scientific inquiry and humane treatment for the mentally ill people. Supernatural explanations were given for abnormal behavior and mentally ill were often accused of being possessed by devil, witchcraft and met with violent deaths such as burnt at stake, drowned or beheaded. In 1486 CE, Pope Innocent published a witch-hunting handbook, *Malleus Maleficarum* (Witch's Hammer) which describes ways of actively hunting out the suspected witches and punishing them.

By the end of the middle ages and with the advent of Renaissance, society began taking a humane view of mental disorders. Swiss and German physicians, **Paracelsus (1490-1541 CE)** and **Johann Weyer (1515–1588CE)** respectively, criticized superstitious beliefs about mental disorders. Weyer in 1583 also wrote a book, *On the Deceits of the Demons* which describes step by step rebuttal ofthe *Malleus Maleficarum*.Weyer is considered as the founder of modern psychopathology as he was the first specialist of mental disorders. Though he faced protests from Church and his works were banned until the twentieth century. The clergy themselves for example, **St. Vincent de Paul (1576-1660 CE)** began questioning the prevalent inhuman practices for treating mentally ill. Strong advocacy for scientific view of mental disorders led to the development of modern clinical and experimental approaches. In sixteenth century, special institutions for mentally ill, known as *asylums* were built but these did not serve the purpose and soon these places were reduced to being referred as "Madhouses". For example, St. Mary of Bethlehem was soon named as St. Mary of Bedlam! Asylums were also established in other countries like Austria, France, Mexico, Russia and USA, but all of these were in a pathetic state and needed reforms.

Humanitarian treatment of people with psychological disorders and mental hygiene movement

In France, **Phillipe Pinel (1745-1826 CE)** began the humanitarian treatment of mentally ill patients. At the same time **Tuke (1732-1822CE)** in England also established a retreat in York for mentally ill and provided them with humane treatment. During this period, **Benjamin Rush (1745-1813 CE)** in Pennsylvania, USA advocated moral management of patients with mental disorders. He is known as the founder of the American psychiatry. He wrote the first systematic treatise on psychiatry in America, *Medical Inquiries and Observations upon Diseases of the Mind* (1812); and was the first American to organize a course in psychiatry (Gentile & Miller, 2009). In the early nineteenth century, humanitarian treatment was replaced by mental hygiene movement by **Dorothea Dix (1802–1887 CE)** in USA. She fought for the cause of poor and forgotten people in mental hospitals and jails. With her efforts, legislation was passed about state providing the mental hospitals, other facilities and financial aid for the treatment of mentally ill people.

Fig. 1.4: Dorothea Lynde Dix (1802-1887)
Source: https://en.wikipedia.org/wiki/Dorothea_Dix

Contemporary Views about psychological disorders

After the mental hygiene movement gained momentum in USA, technical advances occurred in USA and in Europe that gave rise to contemporary views of the mental disorders, its causes and treatment in the late nineteenth century. These views spanned over the biological, psychological and experimental arenas of inquiry. The biological field established the causation between brain pathology and mental disorders, for example, **Emil Kraepelin (1856-1926 CE)** developed the biological viewpoint by emphasizing the importance of brain pathology and mental disorders. He also gave the classification system that became the precursor of modern-day classification system like *Diagnostic and Statistical Manual (DSM)*.

Fig. 1.5: Emil Kraeplin (1856-1926)
Source: https://en.wikipedia.org/wiki/Emil_Kraepelin

Sigmund Freud (1856-1939 CE) introduced the psychological factors by developing a theory of psychopathology that established a causal relationship between mental disorders and inner psychological forces, like psychic energy, unconscious motives, and psychosexual stages of development. Theories of psychopathology were also developed through the experimental studies. The first lab of psychology was established in Leipzig, Germany in 1879 by **Wilhelm Wundt** who showed that psychological processes can be studied through experimentation. Soon it was followed by **Cattell (1860-1944 CE)** who studied individual differences in mental processing by adopting Wundtian methods. Other important works in the tradition of experimental psychology were also carried out that provided a new direction to the theory of psychopathology. For example, **Ivan Pavlov(1849-1936 CE)** gave the principles of classical conditioning based on his famous experiments with the dogs; **John B. Watson (1878- 1958 CE)** through his experiments (Little Albert) established that all behavior (adaptive and maladaptive) is learnt, and so unlearning of the maladaptive behavior can be used as an effective treatment.

Thus, understanding the history of psychopathology helps us to appreciate the struggles and efforts of various thinkers and researchers in the emergence of abnormal psychology and that makes us to understand and treat mental disorders in an efficient, scientific, and humane way.

Check Your Progress 2

1) How were disorders characterized in the middle ages?

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2) What are the contemporary views on psychological disorders?

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1.3 PSYCHOLOGICAL MODELS

There are various approaches to explain mental health disorders and problems. It is not only the individual's biological make-up, but also psychological factors, like childhood experiences, learning, thinking, how one processes information, and such other related factors that influence the development and maintenance of psychological disorders. Thus, in this section the main psychological models, namely, the psychodynamic model, the behavioural model, the cognitive model, humanistic-existential model and socio-cultural model, will be discussed.

1) *The Psychodynamic Model:* The psychodynamic approach was posited by Austrian neurologist Sigmund Freud. In his theory of **psychoanalysis** (first of the'talking therapies'), attempted to explain normal and abnormal behaviour. Activities during childhood are driven by satisfying the needs of id. How does one's psychological mechanisms cope with anxiety and the way in which memories are repressed that might cause conflict and stress, are important in explaining normal and abnormal functioning. Psychological health is maintained when there is a balance among id, ego and superego. If these are in conflict, it will result in psychopathology. Conflict is reduced by using defence mechanisms.

2) *The Behavioural Model:* The model is based on behaviouristic school of psychology. The model puts forth that psychopathology is the result of learned reactions to environmental experiences. 'Faulty learning' is the result of either classical conditioning or operant conditioning.

3) *The Cognitive Model:* The approach was first introduced by Allbert Ellis (1962) and Aaron Beck (1967). The model proposes psychopathology to be the result of individual acquiring irrational beliefs, developing dysfunctional ways of thinking and processing information in biased ways.

4) *The Humanistic-Existentialist Model:* The model proposes that 'insight' into behavioural and emotional problems. People acquire psychological conflicts, however, they have the ability to acquire self-awareness, values, sense of meaning of life and pursue freedom of choice.

5) *Socio-cultural Model:* Social and cultural factors play an important in the development and course of mental disorders. Individual's culture and group

value system, play an important role. Daily life stressors may increase the vulnerability for mental disorders; however, studies also conclude that factors like ethnic identity can buffer against the stressors and protect mental health (Mossakowski, 2003).

1.4 CLASSIFICATION OF PSYCHOLOGICAL DISORDERS

In our daily lives, we come across a lot of information in the form of objects, elements, concepts, living beings etc. It is amazing that we can deal with so much information. We do so by putting information into classes or categories based on our observations of shared characteristics, for example, all four-legged creatures are categorized as animals. Classification can be defined as making generalizations based on our observations. Classification is a necessary step for making sense of information in all formal fields of knowledge, such as sciences, literature etc. Just like other fields of knowledge, abnormal psychology also makes use of classification to deal with information about the various disorders, their causes and treatments.

Carson, Butcher, and Mineka (2007) have defined classification in abnormal psychology as an attempt to delineate meaningful sub-varieties of maladaptive behavior. While diagnosis is assigning an individual to a category of a disorder (e.g., phobia, depression etc.) based on symptoms, classification is assigning all the possible categories to a system that will form the basis for diagnosis.

Need for classification in abnormal psychology (Carson, Butcher, & Mineka, 2007)

- It differentiates among various types or categories of maladaptive behavior;
- It brings order to the nature, causes, and treatment of such behavior;
- It helps in meaningful communication about behavior (normal and abnormal);
- It provides the basis for epidemiological data such as incidence and prevalence of various disorders;
- It provides the basis for formal diagnosis which is especially required by the socio-legal system, e.g., insurance claims, court of law;
- It also helps in identification of new type of disorders which require new treatment techniques.

Approaches of Classification

1) Classical Categorical, 2) Dimensional, and 3) Prototypical

1) ***Classical Categorical approach*** originated in the work of **Emil Kraepelin (1856-1926 CE)** and the biological tradition in the study of psychopathology. According to Butcher, Mineka, Hooley, and Dwivedi (2016), classical approach assumes the following:

   a) All human behavior can be divided into the categories of healthy and disordered;

   b) Disorders are divided into discreet and non-overlapping classes;

   c) Only one set of causal factors per disorder exist;

d) There is only one set of defining criteria for each disorder, which must be met for making a formal diagnosis.

Criticism: Psychological disorders are complex because psychological and social factors interact with the biological factors to produce a disorder. The mental health field, thus,did not adopt classical categorical model (Frances &Widiger, 1986).

2) ***Dimensional approach*** as opposed to the classical categorical approach assumes that:

a) A person's behavior is defined in terms of different strengths along several dimensions, for example, emotional stability, mood, aggression etc. which can be rated on a Likert type of scale. Thus, a person's behavior can be defined on a scale of 0 to 10, as mildly anxious, (2) moderately depressed (5), or mildly aggressive (2);

b) Same dimensions are to be used for defining behavior of everyone;

c) Difference in behavior would be based on the ratings on the established dimensions that may range from low to high.

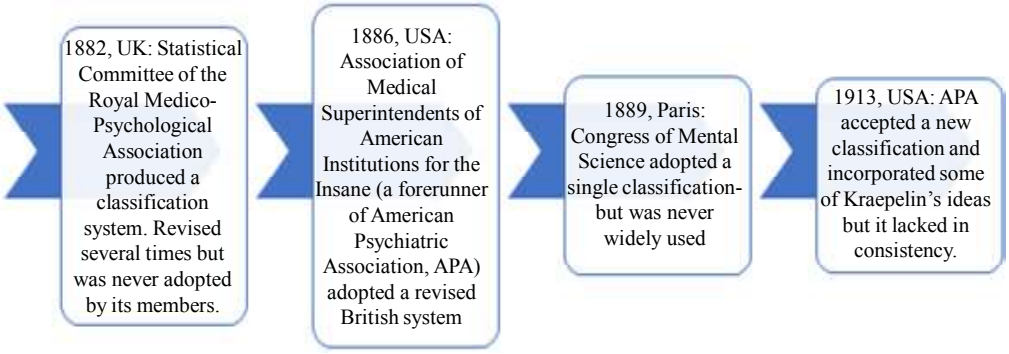
Criticism:Theorists have not reached a consensus on the number of dimensions that can be used to define human behavior as some agree on one dimension while others identify more than thirty-three dimensions (Millon, 1991).

3) ***Prototypical approach*** combines both categorical and dimensional approaches. A prototype is a conceptual entity depicting an idealized combination of characteristics that more or less regularly occur together in a less than perfect or standard way at the level of actual observation (Butcher, Mineka, Hooley, & Dwivedi, 2016). According to this approach, certain essential characteristics are required to classify an entity, however, there are some nonessential characteristics also that do not change the classification.

Criticism:The categories of disorders are not clearly defined as some symptoms are shared by more than disorder. However, it has become the most favored approach as it is user friendly and enlists many different features of the disorder, out of which not all but some are required for the formal diagnosis.

How did we reach to the present system of classification?

Kring, Johnson, Davison, and Neale (2012) have enlisted the following efforts in classification:



Development of ICD (World Health Organisation) and DSM (American Psychiatric Association) Systems

1939, WHO: Added mental disorders to the International list of Causes of Death (ICD)

1948, WHO: International Statistical Classification of Diseases, Injuries, and Causes of Death included classification of abnormal behavior, published the sixth version, ICD-6

1952, APA: Diagnostic and Statistical Manual of Mental Disorders (DSM)

1968, APA: DSM-II, reliability was very low

1969, WHO: A new classification system

1980, APA: DSM-III

1987, APA: DSM-III-R (R stands for Revision)

1990, WHO: ICD-10 was endorsed

1994, APA: DSM-IV

2000, APA: DSM-IV-TR (TR stands for Text Revision)

2013, APA: DSM-5

2018, WHO: A version of ICD-11 was released

General Criticisms of Classification

1) **Classification leads to loss of information*:*** Classifying a person as depressed or anxious results in loss of information about that person, reducing his/her uniqueness. However, it is important to know whether the information lost is relevant (Kring et al., 2012).

2) **Labeling*:*** Once labeled, an individual starts identifying him/herself with the negative connotations associated with the label. It also leads to stigma as mental disorders are viewed negatively by the society (Wahl &Harrman, 1989).

Kring et al (2012) draw attention to some specific criticisms of diagnosis by DSM. They are as follows:

Discrete Entity vs. Continuum (Categorical vs. Dimensional classification): The debate of discrete versus continuum has not been resolved and despite criticism of categorical approach, DSM represents a categorical that is a yes-no approach to classification.

Reliability: The extent to which a classification system or a test produces the same scientific observation each time it is applied. Reliability of DSM-I and II was not accepted. Though, later DSMs improved on the account of reliability however, it still remains questionable.

Validity: The extent to which a classification system measures what it is supposed to measure. The diagnoses of DSM are referred to as constructs because they are inferred not proven, entities. Construct validity is determined by evaluating the extent to which accurate statements and predictions can be made about a category once it has been formed. So, DSM describes the constructs and not facts.

Nevertheless, classification systems like DSM help us in understanding the various disorders, differences among them, their causes and to plan treatment. According to Barlow and Durand (2005), DSM-III in 1980 was a landmark in the history of nosology (classification) as it departed radically from its predecessors, and three changes stood out:

- First, atheoretical approach to diagnosis was attempted that used the precise description of the disorder rather than theories of causal factors.
- Second, specific, and detailed criteria for disorders helped to study their reliability and validity.
- Third, it introduced a "multiaxial system" that allowed clinicians to have a detailed information about their patients through rating them on five different dimensions, or axes. The details of multiaxial system are given below.

Axis I : The disorder itself, such as, schizophrenia or mood disorder

Axis II : More enduring (chronic) disorders of personality

Axis III : Physical disorders and conditions

Axis IV : Amount of psychosocial stress reported by the patient and rated by the clinician in a dimensional fashion

Axis V : Current level of adaptive functioning

A revision of DSM-III called DSM-III-R was published in 1987, with further improvement in reliability and validity.

Problems with DSM-III and III-R

- Some of the diagnostic categories had low reliability.
- Some criteria were whimsically rather than empirically established, e.g., one of the criteria for panic was four panic attacks in a four-week period. A figure reached through an approximation rather than research.
- Despite shortcomings, DSM-III and III-R had a substantial impact. It was more popular and more clinicians used it than the ICD system.

ICD-10 was published in 1993 and to increase compatibility between DSM and ICD-10, work on DSM-IV and ICD-10 was started simultaneously.

DSM-IV (1994) and DSM-IV-TR (2000)

According to Barlow and Durand (2005):

- Scientific data was used to make changes in the diagnostic system;
- Reanalysis of large set of data was done to increase its utility for DSM-IV;
- Independent field trials examined the reliability and validity of alternative sets of definitions or criteria, and, in some cases, the possibility of creating a new diagnosis (Widiger et al., 1998);
- The distinction between organically and psychologically based disorders was eliminated;
- The "multiaxial system" remains with some changes in the five axes. These changes were as follows:

Axis I : Pervasive Developmental Disorders (PDD), Learning Disorders (LD), motor skills disorders, and communication disorders, previously coded on Axis II are now coded on Axis I

Axis II : Personality disorders and mental retardation

Axis III : General medical conditions

Axis IV : Psychosocial and environmental problems (instead of psychosocial stress in DSM-III & III-R)

Axis V : Current level of functioning using the GAF; Global Assessment of Functioning (rating scale of 0-100) in life areas (social and occupational relationships and use of leisure time).

Importance of Multiaxial system

- Usually people consult a clinician for Axis I disorder
- Axis II disorder may exist prior to Axis I disorder
- Presence of Axis II along with Axis I condition indicates difficulty in treatment
- Axes III, IV, and V indicate the factors other than the symptoms that should be considered in an assessment to understand the overall life situation, i.e.,
  - Axis III indicates medical condition believed to be relevant to the present disorder
  - Axis IV indicates a proximal and a contributory cause
  - Axis V indicates how much the person needs treatment based on GAF ratings.

Other positive points of DSM-IV and DSM-IV-TR:

Extensive description of diagnostic categories: For each disorder there is a description of essential features, associated features (lab findings and physical examinations), research literature about age of onset, course, prevalence and sex ratio, familial pattern, and differential diagnosis.

Social and Cultural Considerations: "Cultural formulation guidelines" is a plan for integrating important social and cultural influences on diagnosis (Mezzich et al., 1999), e.g., what is the primary social and cultural group of a patient (e.g., Chinese, Hispanic, etc.).'Have the immigrants mastered the language of their new country?Does the patient use term and descriptions from his or her "old" country to describe the disorder?'These cultural considerations must not be overlooked in making diagnosis and planning treatment, but yet, there is no research supporting the utility of these cultural formulation guidelines (Alarcon et al., 2002).

Overall, the reliability of DSM has improved due to increased explicitness of the DSM criteria; use of standardized, reliably scored interviews for collecting the information needed for a diagnosis.

According to Davison, Neale, and Kring (2004), following problems remained in DSM-IV and DSM-IV-TR:

- Discrete entity vs. continuum issue remains unresolved.
- Arbitrariness in the rules for making diagnosis, e.g., diagnosis of mania is given if the person shows at least three out of seven symptoms listed, or four if their mood is irritable, but why require three and not two or five symptoms?

- The reliability of Axes I and II may not always be high in daily usage, for clinicians may not adhere as precisely to the criteria as the researches.
- The increased reliability may improve validity but it is not guaranteed, a diagnosis may not reveal anything useful about a patient.
- Subjective factors may still play a role in evaluations as well as cultural factors may creep in.
- Not all the DSM classification changes seem positive, e.g., should a problem in learning or arithmetic, or reading be considered a psychiatric disorder? Many childhood problems are made into psychiatric disorder, without good justification for doing so, thereby causing a risk of labeling a child with a disorder.

Continued efforts to improve DSM has led to DSM-5

The DSM-5 was published in 2013 after much debate and controversy. The key aspects are as follows:

- Multiaxial system has been abandoned in DSM-5.
- It has used an operational approach to diagnosis, for example, diagnostic criteria for Persistent Depressive Disorder (Dysthemia) are based on a combination of diagnostic criteria from two diagnoses from *DSM-IV*: Chronic Major Depression and Dysthymic Disorder. It has become more comprehensive and differentiated through addition of newly diagnosed disorders as well as by dividing the previous disorders into subcategories.
- Gender differences have been accounted for diagnosis by providing the differences in prevalence rates and symptoms between male and female patients. For example, antisocial disorder (prevalence is higher in males) and anorexia (higher prevalence in females) and symptoms of conduct disorder are different in males and females (Butcher et al., 2016).
- Appraisal of cultural background has also been done as nowadays clinicians have to diagnose and treat many patients who come from cultural backgrounds that are different from that of the client. Further, migrants are likely to perform more poorly on diagnostic tests not because of a psychological problem but because of unfamiliar language and its nuances being used in the country to which they have migrated. Additionally, their anxiety, depression or other disorders show more severe manifestations because of the stress due to socio-cultural factors (Okazaki, Okazaki, & Sue, 2009). Hence, the clinician must consider the clients' background, attitudes and social values while taking their case history and subsequent therapy sessions.
- The DSM-5contains a structured interview which has a sixteen item Cultural Formulation Interview (CFI). The interview enquires about the patient's perspectives on their present problems, how they perceive the influence of others in influencing their problems, ways in which their cultural background can influence their adjustment and their experiences in seeking treatment for their problems.
- Despite several improvements have been made in DSM-5, however, it continues to suffer from the problem of labeling. Thus, when an individual

is labelled as suffering from schizophrenia, for example, the label does not provide any information about the patient as an individual, his/her strengths and weaknesses other than disorder and the disorder itself. The individual who is labeled also takes the role of the patient and expects him/herself to behave in a certain way which is expected from a psychotic patient. Thus, labeling has a negative effect on the patient as once labeled, the label sticks to the patient for life and his/her other qualities are ignored. Nevertheless, diagnosis is required to understand the causes and prognosis of a disorder, as well as to decide its treatment. Hence, DSM-5 does play an important role in diagnosis but practitioners must use it with caution to avoid labeling of a person at the cost of his/her personhood.

Check Your Progress 3

1) What are the main psychological models that try to explain mental disorders?

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2) Why do we need to classify psychological disorders?

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3) What are the methods of classifying abnormal behavior?

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4) State the importance of a multiaxial system of classification.

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1.5 CAUSES OF PSYCHOLOGICAL DISORDERS

In this section, we discuss the main causes of psycological disorders.

What causes abnormal behavior?

So far, the field of abnormal psychology has been unable to provide a single direct answer to this question. Hence, many investigators prefer to talk in terms of risk factors (variables correlated with an abnormal behavior) rather than causes (Butcher, Hooley, Mineka, & Dwivedi, 2017). Nevertheless, understanding the causes remains the ultimate goal. Causal factors can be analyzed by considering the following:

- ***Distinction between necessary, sufficient, and contributory causes;***
- ***The problem of feedback and circularity in abnormal behavior;***
- ***Concept of Diathesis-Stress model of abnormal behavior.***

The above are explained as follows:

Necessary, sufficient, and contributory causes:

Necessary cause: a condition that must exist for a disorder to occur. It is not always sufficient by itself to cause a disorder. Many mental disorders do not seem to have a necessary cause and the search for such causes continues.

Sufficient Cause: a condition that guarantees the occurrence of a disorder. A sufficient cause may not be a necessary cause. For example, hopelessness is a sufficient cause of depression but it is not a necessary cause as there are other causes of depression as well (Abramson, Alloy, and Metalsky, 1995).

Contributory Cause: a condition that increases the probability of developing a disorder but is neither necessary nor sufficient for the disorder to occur, e.g., divorce might precipitate depression.

Time-frame under which different causes operate is also important (Butcher et al., 2017):

Distal causal factors: causal factors that occur early in life and may not show their effect for many years, but may contribute to a predisposition to develop a disorder, e.g., death of a parent in early childhood may become a distal cause for depression in adulthood.

Proximal causal factor: causal factor that operate shortly before the occurrence of the symptoms of a disorder. It may be a condition that proves too much for a person and may trigger a disorder. Sometimes it may seem to be trivial and only distantly related to the more distal causes, proverbial for the "straw that breaks the camel's back". For example, a minor argument between a couple may lead to major difficulties in case of a couple who are already experiencing marital problems.

Reinforcing cause: condition that tends to maintain maladaptive behavior that is already occurring, e.g., pampering by parents may lead to maintenance of illness in a child.

For many forms of psychopathology, we do not yet have a clear understanding of whether there are necessary or sufficient causes; however, we do have a good understanding of many of the contributory causes for most mental disorders.

Further, what may be a proximal cause at one stage in life may become a distal cause for a disorder later in life, e.g., loss of a parent in childhood may be a proximal cause for the child's grief reaction and may become a distal cause for an anxiety disorder later in adulthood.

The problem of feedback and circularity in abnormal behavior

Abnormal behavior most often does not follow a simple linear model of cause and effect, and sometimes it becomes difficult to distinguish between cause and effect, e.g., whether excessive drinking in a spouse leads to rejection by the other partner or rejection by the partner leads to excessive drinking.

Diathesis–Stress model

The ***diathesis–stress model*** is a psychological theory that explains behavior as both a result of biological and genetic factors ("nature"), and life experiences ("nurture"). This model thus assumes that a disposition towards a certain disorder may result from a combination of one's genetics and early learning. Diathesis is the predisposition toward developing a disorder. It can derive from biological, psychosocial, and/or sociocultural causal factors. Stress is the response of an individual to demands that he/she perceives as taxing or exceeding his/her personal resources. According to the model, this predisposition, in combination with certain kinds of environmental stress results in abnormal behavior. Diathesis-Stress Models have been proposed by Meehl, 1962; Metalsky et al., 1982; Rosenthal, 1963; Zuckerman, 1999.

This theory is often used to describe the manifestation of mental disorders, like schizophrenia that are produced by the interaction of a vulnerable hereditary predisposition, with precipitating events in the environment. It was originally introduced as a means to explain some of the causes of schizophrenia.

Vulnerability

In the diathesis–stress model, a biological or genetic vulnerability or predisposition (diathesis) interacts with the environment and life events (stressors) to trigger behaviors or psychological disorders. The greater the underlying vulnerability, the less stress is needed to trigger the behavior or disorder. Conversely, where there is a smaller genetic contribution greater life stress is required to produce the particular result.

Nevertheless, it is a distal necessary or contributory cause, and is not sufficient to cause a disorder, i.e., someone with a diathesis towards a disorder does not necessarily mean they will ever develop the disorder. Both the diathesis and the stress are required for this to happen.

Check Your Progress 4

1) What are the causes of abnormal behavior?

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2) Explain the diathesis-stress model.

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1.6 ASSESSMENT OF PSYCHOLOGICAL DISORDERS

Psychological assessment dates to Galton's work (1879) and is one of the oldest and most widely developed branches of contemporary psychology (Butcher,2010;

Weiner & Greene, 2008). Butcher, Hooley, and Mineka (2014) have defined psychological assessment as:

"Psychological assessment refers to a procedure by which clinicians, using psychological tests, observation, and interviews, develop a summary of the client's symptoms and problems. Clinical diagnosis is the process through which a clinician arrives at a general "summary classification" of the patient's symptoms by following a clearly defined system such as DSM-5 orICD-10 (International Classification of Diseases), the latter published by the World Health Organization."

Clinical assessment may be defined as the collection, organization, and interpretation of information about a person and his or her situation (Bootzin, 1997). According to Butcher et al. (2014), psychological assessment can be an ongoing process that proceeds along with, rather than only preceding, treatment efforts and may be important during treatment, e.g., to assess outcome. Pre-treatment assessment has several functions, such as, it helps in establishing baselines for various psychological functions so that the effects produced by treatment can be measured; it can be used in court testimony; it helps in screening candidates for various roles and occupations and usually the effort is to identify people who seem to be unfit for a certain occupation.

The basic elements in assessment are as follows:

1) Diagnosis: presenting problem must be adequately classified for several reasons:
   - Medico-legal cases may require it;
   - Helps in planning and managing the treatment;
   - Helps the administration to provide the facilities needed;
   - Taking a social history, that means a basic understanding of the individual's history, intellectual functioning, personality characteristics, environmental pressures, and resources;
   - Helps in understanding the disorder that has brought the person to the clinic.
2) Personality Factors: Such as long-term personality characteristics.
3) The Social Context: The environmental demands, the supports, and the social stressors that exist in a person's life.

The integration of the above information leads to a ***Dynamic Formulation*** which describes the current situation and includes hypotheses about what is driving the person to behave in maladaptive ways (Butcher et al., 2014).

Carson, Mineka, Butcher, and Hooley (2013) have enlisted the following factors that influence the assessment process:

- Clinician's professional orientation, e.g., a psychiatrist will likely focus on biological assessment methods;
- Trust and rapport between the clinician and the client.

Reliability and Validity in Assessment

Reliability refers to consistency of measurement. Following are the types of reliability:

Test-retest: the extent to which people being observed or tested twice score in the same way.

Alternate or Parallel Form: the extent to which scores on the two forms of the test are consistent.

Inter rater: the degree to which two independent observers or judges agree.

Internal consistency: the extent to which items of a test are related to each other.

Validity refers to whether the measure fulfills its intended purpose. Following are the types of validity:

Content validity: whether a measure adequately samples the domain of interest.

Criterion validity: whether a measure is associated in an expected way with some other measure (criterion). It can be assessed by evaluating the ability of the measure to predict some other variable in future, e.g., IQ tests are used as predictors of later school achievement.

Concurrent validity: the extent to which a relationship exists between two variables that are being measured at the same time, e.g., on a measure of distorted thoughts, depressed people score higher than the non-depressed people.

Construct validity: whether a test is a measure of a characteristic or construct (Cronbach & Meehl, 1955) A construct is an inferred attribute, such as, anxiousness or distorted cognition.

1.7 TYPES OF ASSESSMENT

Clinical psychologists collect the data and evaluates the information from the individual with regard to psychological disorder, to make diagnosis, plan the treatment, and prognosis (predict the outcome). The following are the main types of assessment for psychological disorders:

A. Biological Assessment

B. Psychological Assessment
   - Interview
   - Clinical Interview
   - Psychological Tests
   - Observing behaviour

C. Behavioral and Cognitive Assessment

A. Biological Assessment

Biological assessment includes:

1) Brain Imagery: Seeing the brain and how its structure and functioning may be related to abnormal behavior. The following techniques are used for brain imaging:

a) Computerized Axial Tomography Scan (CT or CAT)

This helps to assess structural brain abnormalities. A moving beam of X-rays passes into a horizontal cross section of the patient's brain, scanning it through 360 degrees. The moving X-ray detector on the

other side measures the amount of radioactivity that penetrates and detects subtle differences in tissue density. A computer uses the information to construct a two-dimensional, detailed image of the cross section, giving it optimal contrasts. Then the patient's head is moved and the machine scans another cross section of the brain. This way any structural abnormality, e.g., blood clots, tumors etc. can be detected.

b) Magnetic Resonance Imaging (MRI)

Superior to CT scan, MRI produces pictures of higher quality and does not rely on even the small amount of radiation required by a CT scan. In MRI, the person is placed inside a large, circular magnet, which causes the hydrogen atoms in the body to move. The magnetic force is turned off, the atoms return to their original position and produce an electromagnetic signal. These signals are read by the computer and translated into pictures of brain tissue. It has allowed brain surgeries of such delicate parts of the brain which otherwise would have been inoperable without clear pictures.

c) Functional MRI or fMRI

It allows to take pictures of brain at work. fMRI studies have found less activation in the frontal lobes of patients with schizophrenia than in the frontal lobes of normal people as they performed a cognitive task (e.g., Yurgelon-Todd et al., 1996).

d) Positron Emission Tomography (PET)

This is an expensive and invasive procedure that allows measurement of both brain structure and function. A substance used by the brain is labeled with a short-lived radioactive isotope and injected into the blood stream. The radioactive molecules of the substance emit a particle called a positron, which quickly collides with an electron. A high-energy light particle shoots out from the skull in opposite directions and are detected by the scanner. The computer analyzes millions of such recordings and converts them into a picture of the functioning brain. The images are in color, fuzzy spots of lighter and warmer colors are areas in which metabolic rates for the substance are higher. Visual images of the working brain can indicate sites of epileptic seizures, brain cancers, strokes etc., as well as the distribution of psychoactive drugs in the brain.

2) **Neurochemical Assessment**

PET scanning allows an assessment of receptors for a given neurotransmitter. In postmortem studies, the brains of deceased patients are removed and the amount of specific neurotransmitter and receptors in brain areas can then be directly measured. By analyzing the metabolites of neurotransmitters that have been broken down by enzymes. Metabolite is typically an acid, which is produced when a neurotransmitter is deactivated, e.g., Homovanillic acid is the metabolite of dopamine, 5-hydroxyindoleacetic acid is the metabolite of serotonin. Metabolites can be detected in urine, blood, and cerebrospinal fluid. A high level of a particular metabolite indicates a high level of a neuro transmitter.

3) **Neuropsychological Assessment**

First let us see the difference between a neurologist and neuropsychologist. A **neurologist** is a physician who specializes in medical diseases that affect the nervous system, e.g., cerebral palsy. A **neuropsychologist** is a psychologist who studies how dysfunctions of the brain affect the way, we think, feel, and behave. They have developed tests called **neuropsychological tests**. These tests assess behavioral disturbances caused by brain dysfunctions.

Such tests are often used in conjunction with brain scanning techniques.These are based on the idea that different psychological functions (e.g., motor, speed, memory, language etc.) are localized in different areas of the brain Eg., Halstead-Reitan Neuropsychological Battery (developed by Halstead and then modified by Reitan; Reitan & Davison, 1974), and Luria-Nebraska Neuropsychological Battery (Golden, Hammeke, &Purisch, 1980).

Halstead-Reitan Battery includes the following tests:

1) Tactile Performance Test-Time: performing the form board test while blindfolded, first using the preferred hand and then the other, and finally both. It is sensitive to damage in the right parietal lobe.

2) Tactile Performance Test-Memory: after completing the timed test, patient is asked to draw the form board from memory, showing the blocks in their right location.

3) Speech Sounds Perception Test: participants listen to a series of nonsense words, each comprising two consonants with a long 'e' sound in the middle. They then select the "word" they heard from a set of alternatives. It measures left-hemisphere function, especially temporal and parietal areas.

This battery can help in making diagnostic decisions, e.g., it helps to discriminate between dementia due to depression and dementia due to a degenerative brain disease (Reed & Reed, 1997).

Luria-Nebraska Neuro Psychological battery is based on the work of a Russian psychologist, Alexander Luria (1902-1977). It has 269 items spread out in 11 sections:

1) Basic and complex motor skills; Rhythm and pitch abilities; Tactile and kinesthetic skills; Verbal and spatial skills; Receptive speech ability; Expressive speech ability; Writing; Reading; Arithmetic skills; Memory; Intellectual processes.

2) The pattern of scores is discriminating and indicative of overall impairment, helps reveal damage to the frontal, temporal, sensorimotor, or parietal-occipital area of right or left hemisphere.

3) It takes 2 ½ hours to administer it. Furthermore, it is believed to pick up effects of brain damage that are not yet detectable by neurological examination or imaging techniques.

4) It can control for educational level so that a less educated person will not receive a lower score (Brickman et al., 1984). A version for children ages 8-12 for diagnosing brain damage and in evaluating the educational strengths and weaknesses of children (Golden, 1981; Sweet et al., 1986).

4) Psychophysiological Assessment

Psychophysiology is a field of study that is concerned with the bodily changes that accompany psychological events or that are associated with a person's psychological characteristics (Grings & Dawson, 1978). Bodily changes include heart rate, muscle tensions, blood flow in various parts of the body, brain waves, etc.The activities of the autonomic nervous system can be assessed by electrical and chemical measurements to understand the nature of emotion, e.g.,

- Heart rate is one important measure which is measured by electrocardiogram (ECG).
- Skin conductance or electrodermal responding; anxiety, fear, anger, etc. increase activities in the sympathetic nervous system, which then boosts sweat gland activity that in turn increases the electrical conductance of skin.
- Brain activity is measured by electroencephalogram (EEG), helps in detecting abnormal brain activity, e.g., epilepsy, brain lesions, etc.
- Portable devices are also being used to study blood presoure in vivo (as people go about their daily business).

Critical evaluation of biological assessment

- Many assessment techniques may not differentiate clearly among emotional states such as, skin conductance which not only increases in anxiety but in happiness also.
- Usually, there is no one-to-one relationship between assessment and psychological dysfunctions. Factors such as, duration of brain damage (whether chronic or acute), coping strategies used by the patient, efforts at special education should be taken into account.
- A very important consideration is the abilities that the patient has brought to the event of brain injury, i.e., the patient's repertoire of abilities before the brain damage should be taken into account.

B. Psychological Assessment*:* Interviewing, psychological tests and observing behavior are the main methods to collect data about a psychological disorder.

- **Interview:** The purpose of the interview determines the type of interview to be conducted. The main types are as follows:
  - **Intial intake or admission interview:** The purpose of the initial intake or admission interview is to understand the patient's symptoms and accordingly recommend the most appropriate treatment or intervention plan. The interview can be conducted when the patient is in hospital inpatient care, outpatient facility or any other mental health setting.
  - **Mental Status Examination:** This is conducted primarily to screen the psychological functioning and mark out any absence or presence

of any abnormal mental phenomenon, such as, delirium, hallucination, etc. Insight, judgement, attention, memory, thought processes, etc. are briefly evaluated.

- **Crisis interview:** Such an interview is conducted in the middle of a significant, or a traumatic or life-threatening crisis. Professional engaged in suicide helplines, or a mental health clinic often conduct crisis interview.
- **Diagnostic interview**: The purpose of diagnostic interview is to make a diagnosis after examining symptoms and problems. Diagnosis is formulated by the clinician based on DSM-5 classification.
- **Unstructured interview**: Clinicians operate from only the vaguest outlines. The information is collected largely depends on the interviewer and the responsiveness of the interviewee.Clinicians often rely on their intuition and general experience, as a consequence reliability is probably low, i.e., two interviewers may well reach different conclusions about the same patient. Majority of clinical interviews are conducted within confidential relationships. Hence, it has not been possible to establish either their reliability or their validity through systematic research.
- **Structured Interview**: Questions are set out in a prescribed fashion for the interviewer. Developed by mental health professionals in order to collect standardized information, particularly for making diagnostic judgments based on the DSM-5, e.g., Structured Clinical Interview for DSM-5 Disorders- Clinical Version (SCI-DSM-5 CV). It also contains detailed instructions to the interviewer concerning when and how to probe in detail and when to go on to questions about another diagnosis. Use of structured interviews such as SCID has led to improvement of diagnostic reliability.With adequate training, inter-rater reliability for structured interviews is generally good (Blanchard & Brown, 1998).

Clinical Interview: Korchin (1986) has enlisted the following types of interviews:

Clinical Interview: conversation between a clinician and a patient it is aimed at determining history, causes for problems, and possible treatment options.

Assessment Oriented Interview: typically occurs early in the patient's contact with the clinic; its major purpose is to clarify the clinician's understanding of the patient's problems to plan further intervention.

Therapeutic Interview: facilitates the patient's understanding of him/her self so as to effect desirable changes in his feelings and behavior.

Characteristics of a clinical interview (Kring, Johnson, Davison, & Neale, 2012):

- Attention is paid to the way a respondent answers or does not answer questions;
- The paradigm within which an interview operates influences the type of information sought, how it is obtained, and how it is interpreted. It does not follow one prescribed course but varies with the paradigm adopted by the interviewer;

- Establishing the rapport with the client and obtaining his/her trust is very important because interviews are usually carried out with people who are under considerable stress and sometimes are required to reveal personal information;
- Clinician empathize with their clients in an effort to draw them out of their anxieties;
- A simple summary statements of what the client has been saying is helpful in sustaining the momentum of talk about painful and possibly embarrassing events;
- Accepting attitude toward personal disclosures dispels the fear that revealing secrets to another human being will have disastrous consequences (London, 1964);
- Situational factors of the interview may exert strong influence; however, clinicians often tend to overlook them.

- **Psychological Tests**

'Psychological tests are standardized sets of procedures or tasks for obtaining samples of behavior' (Butcher et al., 2014).The clinician compares an individual's responses on a given test with the test norms or test score distributions and makes an evaluation about him/her based on those comparisons. Nowadays, along with the manual or paper-pencil tests, their computer-administered and computer-interpreted formats are also available.

In comparison to interviews and observational techniques, psychological tests are more precise and reliable, however, these are not perfect as the inferences drawn from such tests depend on competence of the clinician who administers and interprets the tests (Butcher et al., 2014).

There are two main types of psychological tests, namely, intelligence and personality tests.

Intelligence Tests: A wide range of intelligence tests are available today, out of which the most widely used in the clinical practice to measure children' intellectual abilities are the Wechsler Intelligence Scale for Children-Revised (WISC-IV) (Weiss et al., 2006) and the Stanford-Binet Intelligence Scale (Kamphaus &Kroncke, 2004) (Wasserman, 2003). Wechsler Adult Intelligence Scale-Revised (WAIS-IV) is used to measure adult intelligence (Benson et al., 2010; Lichtenberger & Kaufman, 2009). It consists of 15 subtests and measures both verbal and nonverbal intelligence. These tests use extensive with exhaustive items to measure the intellectual abilities, however, are culturally biased. Also, it takes 2 to 3 hours to administer, score and interpret the individual's performance on these tests, hence, these are not time and cost effective. These tests are only used when it is absolutely necessary to measure an individual's intellectual abilities, for example, intellectual impairment, organic brain damage.

Objective Personality Tests: These are the structured personality tests, such as questionnaires, self-report inventories, or rating scales with carefully phrased and precise items and alternative responses as choices (Butcher et al., 2017). The structured format allows objective quantification of the

sample of behavior under study. The precision and quantification increase the reliability of such tests. Some of the widely used objective personality tests are the **NEO-PI** (Neuroticism-Extroversion-Openness Personality Inventory; Costa &Widiger, 2002) used for normal population, the **Millon Clinical Multiaxial Inventory** (MCMI-III; see Choca, 2004) used for clinical population. However, one of the most widely used personality assessment instrument, is the **Minnesota Multiphasic Personality Inventory Revised** (MMPI-2) used for adults (Butcher, 2011; Greene, 2011). Starke Hathaway and J. C. McKinley introduced MMPI for general use in 1943. It was revised in 1989 and renamed as MMPI-2 and remains till today the most widely used personality test for clinical and forensic court related assessment and in psychopathology research in the United States (Archeret al., 2006; Lally, 2003), as well as the most frequently taught assessment tool in graduate clinical psychology programs (Piotrowski & Zalewski, 1993). The translated versions of the inventory are widely used internationally (the original MMPI was translated over150 times and used in over 46 countries; Butcher, 2010). Over 32 translations of MMPI-2 have been made since its publication in 1989 (Butcher & Williams, 2009). It is a self-report questionnaire, consists of 550 items which covers wide range of topics from physical condition and psychological states to moral and social attitudes. Though it is widely used as a diagnostic tool in clinical and forensic setups, however, it has been criticized by psychodynamic as well as behavior schools-oriented clinicians. While the psychodynamics-oriented clinicians criticized it for being too superficial and inadequate for measuring the complexities of human behavior, the behaviorally oriented clinicians felt it measured unobservable "mentalistic" constructs such as traits (Butcher et al., 2014). Nevertheless, it remains one of the most exhaustive objective measure of personality.

Overall, the objective personality tests have advantages as well as limitations. These are cost effective, highly reliable, and objective and can be computer administered and interpreted. However, these have been criticized for being too mechanistic and rely on the literacy ability of the patients. Moreover, since the items or questions are direct so they may elicit not the true but socially desirable answers from the respondents.

Projective Personality Tests: These tests are semi-structured or unstructured and use ambiguous stimuli ranging from less ambiguous such as pictures, incomplete sentence stems, to ambiguous stimuli such as inkblots. Some of the semi-structured projective tests are **Rosenzweig Picture-Frustration test, Thematic Apperception Test**, **Rotter's Incomplete Sentence Blank**, and unstructured projective tests are inkblot tests, such as **Rorschach Inkblot Test**. Since these tests do not rely on explicit verbal questions, so the person's responses are not limited to the "true," "false," or "cannot say" variety. The projective techniques assume that individuals "project" their own problems, motives, and wishes onto the test material when they try to make sense out of vague and unstructured stimuli. People reveal their personal preoccupations,conflicts, motives, coping techniques, and other personality characteristics through their interpretations of the ambiguous materials.

Projective personality tests have their own advantages and limitations. Though the test stimuli are standardized, however, interpretation of the item

responses is subjective and unreliable. Projective tests are especially useful in clinical settings to obtain a comprehensive picture of a person's psychodynamic functioning. However, it's strength is its weakness also, as their interpretation is subjective, unreliable, and these are not time and cost effective in terms of administration and interpretation.

- **Observing behavior:** Behavioural observation involves observation of symptoms and problems related to psychological disorders.

C. Behavioral and Cognitive Assessment

Behavioral and cognitive oriented clinicians are guided by the system that leads them to assess four sets of variables, SORC (Kanfer& Philips, 1970);

S = Stimuli, the environmental situations that precede the problem. The clinician may try to identify the stressors that tend to elicit a given maladaptive behavior.

O = Organismic, referring to both physiological and psychological factors assumed to be operating under the skin. Perhaps, the client's fatigue is caused in part by excessive use of alcohol or by a cognitive tendency toward self-deprecation manifested in such statements, "I never do anything right, so what is the point trying?"

R = Overt Responses. Clinicians determine what behavior is problematic, as well as the behavior's frequency, intensity, and form, e.g., a client might say that he/she is not assertive. Does the person mean that he/she is not assertive in all situations and with everybody or its specific to situations and people?

C= Consequent variables, events that appear to be reinforcing or punishing the behavior in question, e.g., when the client does not show assertiveness, it pays by maintaining the status quo, thereby keeping the person from being assertive.

- A behaviorally oriented clinician attempts to specify SORC factors for a particular client.
- Followers of Skinner underplay the O variables and focus more on S, R, and C.
- Cognitively-oriented behavior therapists pay less attention to C variables because cognitive-behavior paradigm does not emphasize reinforcement.
- The information about SORC is gathered by several methods such as direct observation of behavior in real life as well as in contrived settings, interviews, and self-report measures (Bellack & Hersen, 1998).

1.8 THE INTEGRATION OF ASSESSMENT DATA

Integration of the assessment data into a coherent working model that helps in diagnosis, prognosis and treatment plan. Assessment data is integrated either by the clinician or an interdisciplinary team of professionals, such as, psychologist, psychiatrist, neurologist, psychiatric social worker, nurse, and physiotherapist, and occupational therapists etc. It also helps in evaluating the outcome of therapy and in comparing the effectiveness of different therapeutic and preventive approaches (Butcher et al., 2017).

1.9 ETHICAL ISSUES IN ASSESSMENT

According to Butcher et al. (2017), clinical assessment of an individual has far-reaching implications for him/her, for example, a clinical interpretation may implicate a person as a patient in need of treatment or as a criminal to be punished! Since, it may affect a person's personal as well as professional life, so sources of biases should be kept in mind while making a clinical assessment of a person, such as, a) potential cultural bias of the instrument; b) cultural bias or theoretical orientation of the clinician; c) inadequate emphasis on the external factors; d) insufficient validation of information about the client or his/her situation; and e) insufficient data or premature evaluation.

By considering the strengths and weaknesses inherent in the procedure of clinical assessment, a clinician or a team of mental health professionals can efficiently use it to diagnose and treat the clients.

Check Your Progress 5

1) List the techniques of biological assessment.

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2) What are the ethical issues in assessment?

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3) Differentiate between subjective and objective measures of personality assessment.

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1.10 SUMMARY

Now that we have come to the end of this unit, let us list all the major points that we have already learnt.

- Psychological disorder is a psychological dysfunction within an individual that is associated with distress or impairment in functioning and a response that is not typical or culturally expected.
- The earliest evidence about attempts to understand abnormal behavior comes from sixteenth century BC from Egyptian Papyri.
- Humanitarian treatment of mentally ill patients began in France by Phillipe Pinel.

- Ancient Indian texts, like, Atharveda, Ayurveda, Charaka Samhita and Sushruta Samhita have discussed about diseases that include mental disorders also.
- Classification can be defined as making generalizations based on our observations. Classification is a necessary step for making sense of information in all formal fields of knowledge.
- Classification differentiates among various types or categories of maladaptive behavior and brings order to the nature, causes, and treatment of such behavior
- The DSM-5 was published in 2013 and has used an operational approach to diagnosis.
- Necessary, sufficient, and contributory causes are required to classify abnormalities.
- Psychological assessment refers to a procedure by which clinicians, using psychological tests, observation, and interviews, develop a summary of the client's symptoms and problems.
- There are three types of assessment: biological assessment, psychological assessment and cogintive and behavioral assessment.

1.11 KEYWORDS

Psychological Dysfunction: Refers to breakdown in cognitive, emotional, or behavioral functioning.

Distal causal factors: Causal factors that occur early in life and may not show their effect for many years, but may contribute to a predisposition to develop a disorder

Diathesis–Stress model: The diathesis–stress model is a psychological theory that explains behavior as both a result of biological and genetic factors ("nature"), and life experiences ("nurture").

Brain Imagery: Seeing the brain and how its structure and functioning may be related to abnormal behavior.

Neurochemical Assessment: Analyzing the metabolites of neurotransmitters that have been broken down by enzymes

Neuropsychological Assessment: Assessing behavioral disturbances caused by brain dysfunctions

Psychological tests: Standardized sets of procedures or tasks for obtaining samples of behavior

Reliability: Refers to consistency of measurement.

Validity: Refers to whether the measure fulfills its intended purpose

1.12 REVIEW QUESTIONS

1) _____, into a coherent working model helps in diagnosis, prognosis and treatment plan.

2) _____ picks up effects of brain damage that are not detectable by neurological examination.

3) _____ assumes that a disposition towards a certain disorder may result from a combination of one's genetics and early learning.

4) The biological viewpoint emphasizing the importance of brain pathology and mental disorders was posited by _____.

5) In _____, people reveal their personal preoccupations, conflicts, motives, coping techniques, and other personality characteristics through their interpretations of the ambiguous materials.

6) What are the characteristics of a psychological disorder?

7) Discuss the various methods of classification.

8) How is DSM-5 different from DSM IV?

9) Explain the methods of biological assessment.

10) Elucidate the characteristics of clinical interviewing.

11) What is a psychological assessment?

12) Describe behavioral and cognitive assessment of psychological disorders.

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1.14 WEB RESOURCES

- To read about mental health and illness in India, visit; https://thebanyan.org
- To know about nutrition and mental health, watch the video (Dept. of Neurophysiology, NIMHANS, Bangluru)

  https://youtu.be/yuGbKFAkGjl
- Watch American psychological drama film, *One Flew Over The Cuckoo's Nest*; Directed by Milos Torman (1975).

Answers to the Fill in the Blanks (1-5).

1) Integration of assessment data
2) Neuropsychological assessments
3) Diathesis-stress Model
4) Emil Kraepelin
5) Projective personality tests

UNIT 2 DISORDERS OF ANXIETY, FEAR, PANIC, AND OBSESSIONS-I*

Structure

Learning Objectives

After reading this Unit, you will be able to:

- Differentiate between panic, fear, anxiety and obsession;
- Describe the clinical aspects of anxiety disorders recognised in DSM-5;
- Explain the causal factors of specific phobia and agoraphobia and their treatment; and
- Elucidate the causal factors of social anxiety disorder and panic disorder and their treatment.

2.0 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. In this Unit, you will learn the clinical aspects, causal factors and treatment of specific phobia, social phobia, panic

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disorder, and agoraphobia. You will learn about generalized anxiety disorder and obsessive-compulsive disorders in the subsequent unit. But before we delve further into these disorders, let us first understand about anxiety and other similar conditions such as fear and panic.

2.1 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 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).

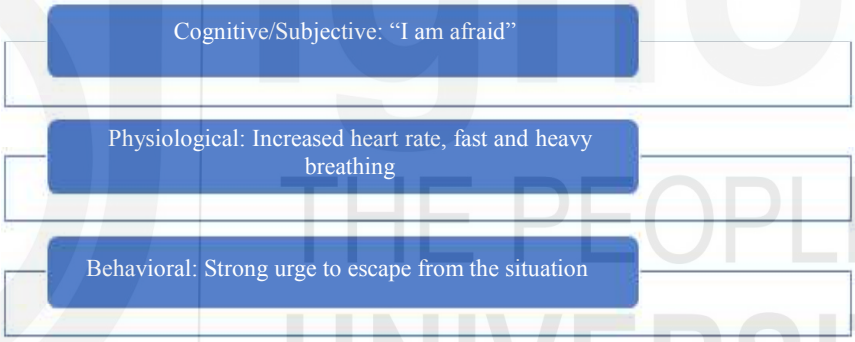

Fig. 2.1 Components of fear

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.

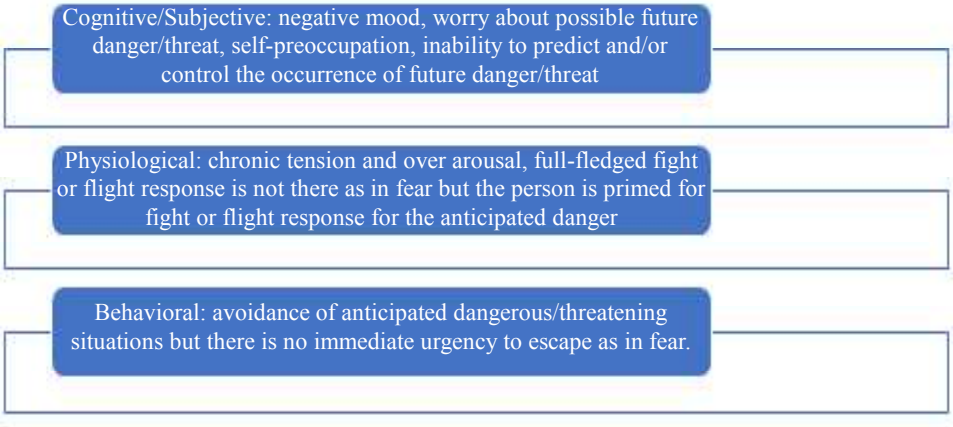

Fig.2.2 Components of anxiety

Check Your Progress 1

1) Differentiate between panic, anxiety and fear.

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2) List the main components of anxiety.

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2.2 CLINICAL FEATURES OF 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" (Carson, Butcher, & Mineka, 2003). DSM-5 has identified three categories of phobias: **specific phobia, social phobia and agoraphobia**.

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).

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.

Agoraphobia was traditionally thought to be a fear of "*agora*", Greek word for public places of assembly (Marks, 1987). It is a fear of crowded places such as shopping malls, theaters etc. It can also be a fear of having a panic attack in situations where escape might prove to be difficult or embarrassing.

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

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). She/he experiences 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 2.1: 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), Posttraumatic 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.

Types of Specific Phobias

DSM- 5 defines five types of specific phobias:

1) *Animal Type:* These include fears of animals such as dogs, cats, spiders, bugs, mice, rats, birds,fish, and snakes.

2) *Natural Environment Type*: These include fears of heights, storms, and being near water.

3) *Blood-Injection-Injury Type*: 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.

4) *Situational Type*: These include fears of situations such as driving, flying, elevators, and enclosed places.

5) *Other Type:* 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.

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 (Chandrashekhar & Reddy, 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 more 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.

2.3 WHY DO PHOBIAS DEVELOP?

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.

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.

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.

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.

2.4 TREATMENT OF PHOBIA

The main treatment options for phobia are as follows:

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.

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).

Check Your Progress 2

1) What are phobias?

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2) Explain modelling as the way to treat phobia.

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2.5 CLINICAL FEATURES OF SOCIAL ANXIETY DISORDER (SOCIAL PHOBIA)

Social phobia is a persistent, irrational fear generally linked to the presence of other people. It can be extremely debilitating.What is the difference between

Social Phobia and Social Anxiety Disorder?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. 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 he/she 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.

Box 2.2: 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.

2.6 CAUSAL FACTORS FOR SOCIAL ANXIETY DISORDER

Let us understand the casual factors for social anxiety diorder.

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).

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).

Evolutionary perspactive: 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).

2.7 TREATMENT OF SOCIAL PHOBIA

Main treatment options used by people for social phobia are:

- **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).

- **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.

Check Your Progress 3

1) What are the characteristics of social phobia?

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2) Why does social phobia develop?

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3) How does cognitive-behaviour therapy help in the treatment of social phobia?

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2.8 CLINICAL ASPECTS OF PANIC DISORDER

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 a half hour.

Box 2.3: Criteria for Social Phobia according to DSM-5 (APA, 2013)

A. Recurrent unexpected panic attacks. A panic attack is anabrupt 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.

Table 2.1: Distinguishing features between Panic and Anxiety

Panic Attack	Anxiety
• Symptoms develop abruptly	• Does not have an abrupt onset
• Usually reach peak intensity within 10 minutes subside in 20 to 30 minutes	• Symptoms are not as intense as in panic
• Rarely last more than an hour	• It is long lasting

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).

2.9 CAUSAL FACTORS FOR PANIC DISORDER

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

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.

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.

2.10 TREATMENT OF PANIC DISORDER

The approches to treatment of panic disorder are as follows:

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.

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).

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).

Check Your Progress 4

1) List the clinical features of a panic attack.

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2) Mention the cognitive factors that lead to development of panic attacks.

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3) How does integrative technique help in the treatment of panic disorder?

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2.11 SUMMARY

Now that we have come to the end of this unit, let us list all the major points that we have already learnt.

- The main anxiety disorders that have been identified by DSM-5, are generalized anxiety disorder, specific phobia, social phobia, panic disorder, and agoraphobia.
- 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.

2.12 KEYWORDS

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. It 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.

2.13 REVIEW QUESTIONS

1) Panic control treatment to treat panic disorder combines _____.
2) Medications such as antidepressants (e.g., Monoamine Oxidase Inhibitors, and Selective Serotonin Reuptake Inhibitors) have been proved to be effective treatment for _____.
3) Phobias represent a defense against anxiety that stems from repressed impulses of the id. This is the _____ perspective of phobia.
4) Fear of public speaking or generalized as in fear of many different social interactions is known as _____.
5) Agoraphobia refers to the fear of _____ and _____.
6) Define anxiety and give the characteristics of anxiety disorders.
7) What is the DSM-5 criteria of a panic attack?
8) Discuss the causes of social anxiety disorder.
9) What are the different kinds of phobias?
10) Discuss the treatment of panic disorder.

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2.15 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

Answers to the Fill in the Blanks (1-5)

1) cognitive restructuring integrated with exposure therapy
2) social phobia
3) psychoanalytical
4) social phobia
5) enclosed spaces, such as tunnels, small rooms, and elevators.

UNIT 3 DISORDERS OF ANXIETY, FEAR, PANIC, AND OBSESSIONS-II*

Structure

Learning Objectives

After reading this Unit, you will be able to:

- Describe the clinical features of generalised anxiety disorder;
- Elucidate treatment of generalised anxiety disorder;
- Identify the clinical features of obsessive-compulsive disorders; and
- Explain the various treatment options for obsessive-compulsive disorders.

3.0 INTRODUCTION

As you learnt in the previous Unit, there are several anxiety disorders that have been identified by DSM-5, like generalized anxiety disorder, specific phobia, social phobia, panic disorder, and agoraphobia. The clinical aspects, causal factors and treatment of specific phobia, social phobia, panic disorder, and agoraphobia were covered in the previous unit. In this Unit, you will learn the clinical features, causal factors and treatment of generalized anxiety disorder and obsessive-compulsive disorders. Previous DSMs classified obsessive-compulsive disorder (OCD) as an anxiety disorder. However, DSM-5 has listed it under a separate category, named as obsessive-compulsive and related disorders. Let us learn about these disorders in detail.

3.1 GENERALIZED ANXIETY DISORDER

Generalized Anxiety Disorder (GAD) is a state of chronic, excessive and unreasonable worry about multiple life events or activities. Since anxiety is not

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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).

3.2 CLINICAL FEATURES OF GENERALIZED ANXIETY DISORDER

The clinical features of GAD, according to DSM-5, have been explained in the box (Box 3.1).

Box 3.1: 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; and
- Failure to control their tendency to worry gives them a feeling of helplessness.

3.3 CAUSAL FACTORS: WHY DOES GAD DEVELOP?

There are many possibble causes of GAD to develop. They arre indicated as follows:

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).

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).

3.4 TREATMENT OF GAD

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

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).

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).

Check Your Progress 1

1) List the characteristics of GAD.

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2) Explain the psychoanalytical perspective for the development of GAD.

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3) What are the treatment options for GAD?

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3.5 OBSESSIVE-COMPULSIVE DISORDER

Obsessive-compulsive disorder (OCD) is characterised by the occurrence of unwanted, intrusive obsessive thoughts and distressing images which are usually accompanied by compulsive behaviors. Compulsive behaviors are carried out either to undo or neutralize the obsessions or to prevent the occurrence of some dreadful event.

3.6 CLINICAL ASPECTS OF OCD

Obsessive-compulsive disorder (OCD) is now included in DSM-5 under the category of obsessive-compulsive and related disorders**. Other disorders included are hoarding disorder, excoriation (skin picking) disorder, body dysmorphic disorder and trichotillomania (compulsive hair-pulling).** Many of us may occasionally find ourselves indulging in repetitive or stereotypical behavior such as checking locks or gas stove; however, it does not mean that we suffer from OCD. Obsessive-compulsive disorder involves much more excessive, persistent and distressing thoughts and the associated compulsive acts that significantly interfere with everyday activities (See Box 3.2 for DSM-5 criteria).

Box 3.2: Criteria of Obsessive-Compulsive Disorder, DSM-5 (APA,2013)

A. Presence of obsessions, compulsions, or both:

Obsessions are defined by (1) and (2):

1) Recurrent and persistent thoughts, urges, or images that are experienced, at some time during the disturbance, as intrusive and unwanted, and that in most individuals cause marked anxiety or distress.

2) The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some other thought or action (i.e., by performing a compulsion).

Compulsions are defined by (1) and (2):

1) Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly.

2) The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent, or are clearly excessive.

Note**:** Young children may not be able to articulate the aims of these behaviors or mental acts.

B. The obsessions or compulsions are time-consuming (e.g., take more than 1 hour per day) or cause clinically significant distressor impairment in social, occupational, or other important areas of functioning.

C. The obsessive-compulsive symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

D. The disturbance is not better explained by the symptoms of another mental disorder (e.g., excessive worries, as in generalized anxiety disorder; preoccupation with appearance, as in body dysmorphic disorder; difficulty discarding or parting with possessions, as in hoarding disorder; hair pulling, as in trichotillomania [hair-pulling disorder]; skin picking, as in excoriation[skin-picking] disorder; ritualized eating behavior, as in eating disorders; preoccupation with substances or gambling, as in substance-related and addictive disorders; preoccupation with having an illness, as in illness anxiety disorder; sexual urges or fantasies, as in paraphilic disorders; impulses, as in disruptive, impulse-control, and conduct disorders; guilty ruminations, as in major depressive disorder; thought insertion or delusional preoccupations, as in schizophrenia spectrum and other psychotic disorders; or repetitive patterns of behaviour, as in autism spectrum disorder).

According to DSM-5, "obsessions involve persistent and recurrent intrusive thoughts, images, or impulses that are experienced as disturbing, inappropriate, and uncontrollable. People who have such obsessions actively try to resist or

suppress them or to neutralize them with some other thought or action. Compulsions can involve either overt repetitive behaviors that are performed as lengthy rituals (such as hand washing, checking, putting things in order over and over again). Compulsions may also involve more covert mental rituals (such as counting, praying, or saying certain words silently over and over again). A person with OCD usually feels driven to perform this compulsive, ritualistic behavior in response to an obsession, and there are often very rigid rules regarding exactly how the compulsive behavior should be performed. The compulsive behaviors are performed with the goal of preventing or reducing distress or preventing some dreaded event or situation".

OCD lowers the quality of life and leads to significant functional impairment and thus it is often considered to be one of the most disabling mental disorders (Stein et al., 2009). Unlike schizophrenia (in which absence of insight is a characteristic feature), the person suffering from OCD must recognize that the obsessions and compulsions have not been imposed externally but are the product of his or her own mind and are senseless and excessive. However, this insight may be absent in a minority of cases (Ruscio et al., 2010). As mentioned above, many of us may experience obsessions and compulsive behavior occasionally but the diagnosis of OCD implies spending at least 1 hour in obsessional and compulsive activities and most of the waking hours in severe cases. But research has shown that normal and abnormal obsessions and compulsive behaviors are placed on a continuum in terms of differing frequency, intensity, troublesomeness and the degree of resisting the obsessions and compulsions (e.g., Steketee & Barlow, 2002). More than 25 percent of people in the National Comorbidity Study (NCR-R) were found to have experienced obsessions or compulsions at some point in their lives by Ruscio et al. (2010).

Obsessive thoughts involve themes like fears of contamination, harming oneself or others, pathological doubt, need for symmetry, religious, aggressive and/or sexual obsessions. These themes have been reported to be consistent across cultures and life span (Pallanti, 2009). Aggressive or violent themes often involve thoughts of harming close family members such as poisoning a spouse or children and though rarely acted on, such thoughts torment the person who has such thoughts.

To deal with such tormenting thoughts, people with OCD are often compelled to indulge in meaningless and sometimes absurd activities are known as compulsions. There are 5 primary compulsive behaviors, cleaning (washing), checking, ordering, arranging, and counting (Mathews, 2009). At a given time, different kinds of compulsive behaviors may be shown by people. Some people may show extreme slowness in performing daily chores while others may insist on having things in a strictly symmetrical fashion (Mathews, 2009). Washing or cleaning may range from washing hands for 15-20 minutes (with only water or general soap) to several hours of washing hands with detergents or disinfectants. This may lead to bleeding hands with scaling and peeling skin. Similarly, checking rituals may range from mild (checking for lights, locks etc.) twice or thrice a day to extreme checking where people would go back to their third-floor apartment after reaching the basement parking and repeatedly indulge in the same behavior, so that they are unable to perform the activity that they were supposed to do. Since both cleaning and checking rituals are carried out a specific number of times so these also involve repetitive counting. Although, performing the compulsive acts lead to reduction in anxiety and a sense of control but the relief

is short-lived and so the person has to keep on repeating the act (e.g., Purdon, 2009).

Comorbidity with Other Disorders

Mood and anxiety disorders (e.g., social phobia, panic disorder, GAD, and PTSD) often co-occur with OCD (Mathews, 2009). Several research studies have reported that 25 to 50 percent of people with OCD are likely to experience major depression at some point in their lives. Further, significant depressive symptoms are likely to be found in approximately 80 percent of people with OCD (Torres et al., 2006). One plausible reason suggested for co-occurrence of depression is that it could be a patient's response to the chronic and debilitating nature of OCD. Further, the dependent and avoidant personality disorders can also co-occur with OCD. Body dysmorphic disorder (BDD) has also been found to co-occur frequently with OCD, e.g., a study found body dysmorphic disorder in 12 percent of patients with OCD. In fact, researchers have suggested a close relationship between OCD and BDD (e.g., Phillips et al., 2007, 2010; Veale & Neziroglu, 2004).

Prevalence, Age of Onset, and Gender Differences

The prevalence rate of OCD was 1.2 percent, and the lifetime prevalence was 2.3 percent in the National Comorbidity Survey-Replication study (Ruscio et al., 2010). However, some studies have reported a lifetime prevalence of 3 percent (Kessler et al., 2009). Both obsessions and compulsions are experienced by 90 percent of the patients with OCD (Franklin & Foa, 2007). Obsessive-compulsive disorder leads to disturbed interpersonal and occupational relationships which might be a reason for an overrepresentation of divorced and/or separated and unemployed people among the patients with OCD (Torres et al., 2006). Unlike other anxiety disorders where more females suffer than males, no significant gender difference has been reported. The onset age is usually late adolescence or early adulthood when prevalence is also the highest. However, OCD can be found in children also with symptoms like adults (Poulton et al., 2009) with higher prevalence, heritability, and severity among boys than in girls (Lomax et al., 2009). Often the onset is gradual, and it tends to be chronic once the symptoms become severe (e.g., Mataix-Cols et al., 2002).

3.7 CAUSAL FACTORS OF OCD

The main causal factors of OCD are as follows:

Biological Factors

Genetic Component: In a twin study, concordance rates of 68 percent and 31 percent were found for eighty pairs of monozygotic and 29 pairs of dizygotic twins, respectively which indicates a moderate heritability of OCD (van Grootheest et al., 2007). In family studies, prevalence rate of OCD in first degree relatives of probands has been found to be 3 to 12 times higher than the normal population (Grabe et al., 2006). Further, genetic component is significantly stronger in the early onset of OCD than in the later onset of OCD (Grisham et al., 2008). Also, tic-related OCD in childhood which is linked to Tourette's syndrome has also been found to have a significant genetic component (Lochner & Stein, 2003), for example, OCD was found in 23 percent of first-degree relatives of patients with Tourette's syndrome (Pauls et al., 1995). Lastly, the field of molecular genetics has found specific genes for OCD that are different from Tourette's syndrome (Grisham et al., 2008; Stewart et al., 2007).

Structural and Functional Abnormalities of Brain: Brain imaging of OCD patients has shown abnormalities in cortical and subcortical regions such as the basal ganglia. PET scans have also shown higher levels of activity in orbitofrontal cortex and cingulate gyrus. In turn, all these structures are connected to the amygdala, thalamus, and the limbic system. This brain circuitry is responsible for the activation of primitive behaviors such as hygiene, aggression, and sex. Symptoms of OCD lead to increased activation of this brain circuitry (Evans, Lewis, & Lobst, 2004). Successful treatment of OCD shows some normalization of this brain circuitry (Saxena et al., 2002). The central themes for obsessions, such as sex, aggression, danger, and hygiene originate in the orbital frontal cortex (Baxter et al., 1991). The cortico-basal-ganglionic-thalamic circuit allows only the strongest of the primary urges to pass through and reach the thalamus which is the relay station. All sensory input is received by the thalamus, which then passes that sensory input back to the cerebral cortex. Baxter et al. (1991, 2000) have proposed that abnormal functioning of the cortico-basal-ganglionic-thalamic circuit due to overactivation of orbitofrontal and cingulate cortical regions does not allow the controlled passage of information with the result that all the messages, even subtle ones, regarding hygiene, aggressions etc. pass through. This leads to inappropriate behaviors, such as repetitive behaviors in response to concerns like aggression, hygiene etc. thereby leading to obsessional and compulsive behavioral pattern. Research evidence (e.g., Szeszko et al., 2004; Yoo et al., 2007) has suggested that one possible reason for abnormal circuitry can be the abnormalities in white matter in the brain areas that form this circuit.

Neurochemistry of Brain: Indirect evidence for the involvement of serotonergic system in OCD came from the pharmacological studies, e.g., in 1970s a tricyclic antidepressant called clomipramine was found to be an effective treatment for OCD. Although other tricyclic antidepressants are also available, but clomipramine has been found to be most effective as it has significantly greater effects on serotonin (Dougherty et al., 2007; Stewart et al., 2009). Also, selective serotonin reuptake inhibitors (SSRIs) have also proved to be effective in treatment of OCD (Dougherty, Rauch, et al., 2002, 2007). Interestingly, increased serotonergic activity leads to OCD symptoms then how these antidepressants which lead to an increase in the serotonin level could treat OCD? The antidepressants such as tricyclics and SSRIs in a short term use increase the serotonin levels but when taken for longer duration (6 to 12 weeks) leads to down-regulation of serotonin receptors, causing a functional decrease in the serotonin levels, which helps in controlling the symptoms of OCD (Dolberg et al., 1996). GABA, glutamate and dopaminergic systems are also suggested to be involved in OCD; however, their exact role is yet to be established (Stewart et al., 2009).

It can be concluded that biological factors such as genetic components, structural, and neurochemical abnormalities of brain have been found to be involved as causes in OCD, however, the exact nature and contribution of these factors in OCD are yet to be established.

Psychological Factors

Learning Theory: Mowrer (1947) has explained the obsessive-compulsive disorder through his two-process theory of avoidance learning. In the first step, through classical conditioning, the neutral stimuli get associated with frightening thoughts and elicit anxiety, for example, a person associates behaviors like,

touching a door handle or brushing of clothes against the wall/floor with infection and so develops fear of contamination. In the second step, the person tries to prevent infection by washing hands or clothes which also reduces the fear of contamination. Thus, the person learns that washing behavior is effective in anxiety reduction thereby reinforcing the washing response. In future, the person would indulge in washing behavior whenever he/she feels anxious about contamination (Rachman & Shafran, 1998). Since such behaviors reduce anxiety hence these are extremely resistant to extinction (Mineka & Zinbarg, 2006). Animals and humans have been reported to indulge in avoidance behavior frequently when they face stressful and anxiety provoking events (e.g., Cromer et al., 2007). In support of this theory, Rachman and Hodgson (1980) conducted several studies. They purported that although an anxiety eliciting situation may provoke many of us but people with OCD are forced to perform some action repeatedly to reduce anxiety caused by an obsession. Despite realizing the futility of his /her obsessions and related compulsive behaviors, the person is unable to control such compulsive behaviors because these lead to reduction in anxiety caused by the obsessions.

Thus, this model suggests that exposure to the anxiety provoking situation without allowing the person suffering from OCD to indulge in an anxiety reducing compulsive act will help in treatment. The underlying reasoning is that when the person will find their anxiety subsiding on its own without indulging in any compulsive act, it will help them realize the futility of their compulsions (Rachman & Shafran, 1998). This model helps us to understand the maintenance of the obsessive-compulsive behavior however, it is silent on the causal factors.

Cognitive Perspective: The 'paradoxical effect of thought suppression' helps us to understand the cause of OCD. It has been shown experimentally that attempts at suppressing of thoughts in normal people often leads to increase in those thoughts later (Abramowitz et al., 2001; Wegner, 1994). People with OCD differ from normal people with respect to the degree of thought suppression, i.e., people with OCD find it more difficult to suppress their thoughts and failure at thought suppression leads to negative mood. In a study, people with OCD were asked to maintain a diary about their obsessive thoughts under two conditions. In one condition, they were asked to suppress their thoughts and in the other condition no such instructions were given. It was found that they reported more thoughts when instructed for thought suppression (Salkovskis & Kirk, 1997). Researchers have also found that obsessive-compulsive symptoms increase in general because of thought suppression and such people spend a lot of time and effort in thought suppression but remain unsuccessful in doing so (Purdon, 2004).

Several researchers like Salkovskis (e.g., 1989), Rachman (1997) have suggested that rather than the obsessive thought itself, it is the appraisal of that thought in terms of negative and catastrophic automatic thoughts that produces disturbances and subsequent compulsive behavior. Thought-action-fusion has also been suggested to explain OCD *fusion* (Berle & Starcevic, 2005; Rachman et al.,2006; Shafran & Rachman, 2004). According to this explanation, people with OCD have an exaggerated sense of responsibility and they interpret having a negative thought as equivalent to acting on it. For example, if a person with OCD has a thought of harming ones parent(s) they would appraise it as morally equal to actually harming their parent(s), that is, ones thoughts and actions have been fused together. To decrease the anxiety associated with this thought-action-fusion, the person may indulge in compulsive behaviors.

People with OCD also show cognitive biases and cognitive distortions, for example, research studies have shown that just like people suffering from other anxiety disorders, their attention is also focused on disturbing events that are part of their obsessions (Mineka et al., 2003). Further, they lack confidence in their short-term memory and hence indulge in ritualistic behavior repeatedly that increases their compulsive behavior (Dar et al., 2000). According to researchers (e.g., Morein-Zamir et al., 2010; Bannon et al., 2008), such people also fail to inhibit motor responses and irrelevant information.

Evolutionary Factors

According to the evolutionary theorists, OCD has a role in our survival, for example, thoughts about contamination and subsequent actions to prevent it helps us to protect ourselves from potential infections and thus are valuable to our lives (Mineka & Zinbarg, 1996, 2006). Also, displacement activities shown by many animals in stressful situations resemble compulsive actions of OCD, such as birds preening feathers in threatening situations (Craske, 1999).

3.8 TREATMENT OF OCD

The treatment options for OCD are as follows:

Behavioral Therapy: A combination of exposure therapy and response prevention has been found to be effective in treating OCD (Stein et al., 2009). In this treatment, the therapist along with the client prepares a hierarchy of distressing stimuli, which is rated by the client on a 0 to 100 scale in terms of the severity of distress or anxiety caused to the client. Then the client is asked to expose him/herself to stimuli given in the hierarchy (in ascending order of anxiety) that cause obsessive-compulsive responses, such as touching the doorknob. This is followed by response prevention where the client is asked not to engage in any ritual like, washing hands to deal with the anxiety provoked by the obsession. The response prevention is important as the client can see that even when he/she did not engage in a ritual to reduce anxiety and obsessional thought, no catastrophe occurred, and the anxiety also reduced by itself. This observation helps the client to understand the futility of his/her obsessive-compulsive responses, thereby extinguishing them completely. Though some clients may not comply with this treatment but many who do, show a symptom reduction of 50 to 70 percent (Abramowitz et al., 2009).

Cognitive-Behavior Therapy: Though cognitive-behavior techniques, such as cognitive restructuring has been found to be effective in treating OCD, however, these have not been found to be superior to behavior therapy (Abramowitz et al., 2009).

Medications: Antidepressants, specifically those that affect the functioning of the neurotransmitter, serotonin have been reported to reduce symptoms by 25-35 percent in 40 to 60 percent of the patients with OCD (Dougherty, et al., 2007). In some cases of OCD which do not respond to the antidepressants, antipsychotic medications in small amounts have been found to significantly reduce symptoms (Bloch et al., 2006). However, a limitation of medication is that, relapse occurs in 50 to 90 percent of patients on discontinuation of it (Dougherty et al., 2007). In severe cases of OCD, where the patient suffers from the disorder for at least 5 years and does not respond to any treatment (psychotherapy or drug therapy),

neurosurgical techniques have been suggested. However, these have been used sparingly because of adverse side effects (Mindus, Rasmussen, & Rück et al., 2008). Lastly, evidence has been found that lesser number of exposure and response prevention sessions are required when the drug, d-cycloserine is also prescribed to the patients of OCD (Wilhelm et al., 2009).

Check Your Progress 2

1) Differentiate between obsessions and compulsions.

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2) What are the causal factors in the development of OCD?

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3) Explain behaviour therapy as a treatment option for OCD.

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3.9 SUMMARY

Now that we have come to the end of this unit, let us list all the major points that we have already learnt.

- 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.
- Obsessive-compulsive disorder (OCD) is characterized by the occurrence of unwanted, intrusive obsessive thoughts and distressing images which are usually accompanied by compulsive behaviors.
- OCD lowers the quality of life and leads to significant functional impairment and thus it is often considered to be one of the most disabling mental disorders.
- Behaviour therapy is considered essential in the treatment of OCD, though medication is also used.

3.10 KEYWORDS

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

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

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

Obsessive-compulsive disorder (OCD): Characterised by the occurrence of unwanted, intrusive obsessive thoughts and distressing images which are usually accompanied by compulsive behaviors.

3.11 REVIEW QUESTIONS

1) Generalized Anxiety Disorder was earlier described as .....
2) A combination of exposure therapy and response prevention has been found to be effective in the treatment of .....
3) When Corticotropin Releasing Hormone is activated by stress or perceived threat that stimulates the ..... which in turn releases the .....
4) The psychoanalytic perspective of the occurrence of GAD is the .....
5) Failure in thought suppression is the cognitive causal factor for .....
6) What is the DSM criteria to identify OCD?
7) Discuss the treatment options for Obsessive-Compulsive disorder.
8) Describe the clinical features of GAD and discuss its causal factors.

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3.13 WEB RESOURCES

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

Answers to the Fill in the Blanks (1-5)

1) Free floating anxiety
2) Obsessive Compulsive Disorder
3) Pituitary gland; adrenocorticotropic hormone
4) Conflict between id impulses and ego
5) Obsessive Compulsive Disorder