

CLINICAL PSYCHOLOGY INTERNSHIP

Mentored by:

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A Presentation by

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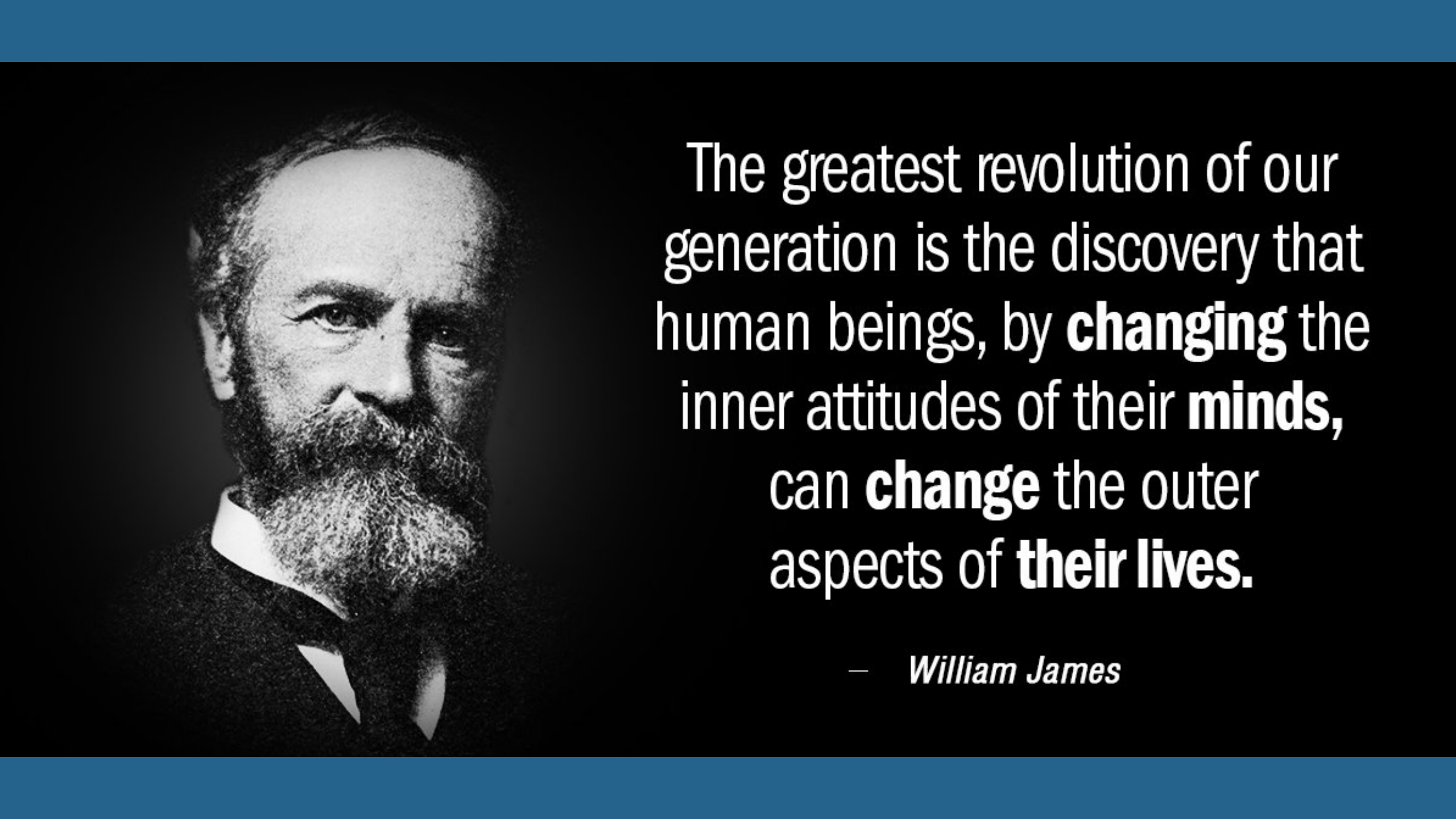
My Mission

Understanding

PSYCHOLOGICAL

APPLICATION

in Clinical Environment



The greatest revolution of our generation is the discovery that human beings, by **changing** the inner attitudes of their **minds**, can **change** the outer aspects of **their lives**.

— *William James*

Cases Handled at
Neptune Hospital, New Delhi under

Dr. Rahul Murada

Neuropsychiatrist

15 May to 17 June, 2023

**My Role: MSE (Mental Status Examination) &
Clinical Observership**



Shoumilee Ray (Right) with mentor Dr. Rahul Murada (Left), Neuropsychiatrist, Neptune Hospital, New Delhi

Key Learnings
as Mental Status Examiner
& Clinical Observer

#1

Dementia

- It is a global, irreversible, progressive decline in higher mental functions and presence of cognitive problems for over 6 months of time.
- Alzheimer's is a type of dementia which can only be labeled on post mortem of a deceased patient when a brain tissue section is observed under a microscope.
- Sun downing phenomenon is a trend of increase in anxiety, aggression, confusion post sunset thus making the later half of the day worse for dementia patients.

#2

Delirium

- It is a foggy / cloudy state which is acute and reversible and the individual is not alert or fully conscious.

#3

Mania

- It is of two types: **grandeur / elated** in which one believes one is the best and has a 'my way or the highway' attitude and **paranoid dysphoric** which contains elements of psychosis making the patient highly irritable.
- Clang association is a change of speech patterns in patients suffering from mania that causes derailment from main point of the sentence to use of puns / rhyming words and alliterations. This is also seen in the manic phase of bipolar disorder.

#4

Thought Disorders

- It is of two types- content thought disorder in which the content/main idea of the thought is impacted and formal thought disorder
- Formal thought disorder related how thought are expressed through speech. It may be positive or negative.
 - posFTD is characterized by loud tone, rhythmic speech, derailment, word salad, neologisms and tangential thought process
 - negFTD is characterized by poverty of speech, poverty of ideas as well as alogia (zero speech)

#5

Intellectual Difficulty

- It may be caused by birth, by trauma or by any form of insult to the brain in the form of neurotoxicity, injury, fever, infection, nutritional deficiency etc.
- The brain, spinal cord and nerves are the only part of the body which lack regeneration ability. Thus any damage to the same will cause irreversible damage.
- It is diagnosed through self report (from the patient), MRI scans, observing social cues and scholastic results as well as overall behaviour of the patient.

#6

Alcohol Dependence

- Alcohol dependence is always physical and is observed in the forms of delusion of persecution / infidelity, auditory hallucinations, high irritability, as well as shaking / tremors.
- All CNS depressants have effects and dependence similar to that of alcohol.
- Substance usage will impact the medication's mechanism of action, rate of action as well as efficacy.

#7

Behavioural Expressions of Dementia

- Although dementia is irreversible and can only be controlled through medication and therapy the behavioural manifestations of the same are reversible/curable.
- The behavioural expressions may be in the form of uttering profanities, uttering to self, uttering to the dead, over suspiciousness and hostile behaviour.

#8

Hierarchy of Diagnosis

1. **Organicity:** Psychological conditions as a result of infections, injuries, malnutrition and other physiological changes
2. **Psychotic:** Psychological conditions in which the patient has no insight or judgement of right and wrong. (e.g. dementia, schizo etc.)
3. **Neurotic:** Psychological conditions in which the patient has insight and can accurately report the problem with their ability to judge (e.g. anxiety, bipolar disorder)
4. **Malingering:** Dramatization or lying about psychological conditions in hopes of personal gain

#9

New Buzzwords of Medicine

- Zinc, Magnesium and Vitamin D are now increasingly used in medicine due to their functions as catalyst of inherent body processes.
- Zinc facilitates mitosis and meiosis thus promoting cell division, healing damaged cells and DNA replication. It also facilitates antibody production thus effecting the immune system responses.
- Magnesium helps in maintaining heart rhythm.
- Vitamin D helps in maintaining calcium and phosphorous levels in the body.

#10

Sleeping Pills

- Sleeping pills may be benzodiazepines. E.g. zolfresh, lorazepam All benzodiazepines are addictive in nature and hence post substitution therapy must be discontinued else it may give rise to problems.
- Sleeping pills may also be natural and non addictive such as melocet which regulates the melatonin levels in the body to ensure proper sleep after sunset.

#11

Exercise

- It is better to exercise in heat than in cold because when the surrounding temperature is low, the body vasoconstricts in an attempt to maintain homeostasis. This constriction of blood vessels may cause stress to the heart which is aggravated on exercising.
- It is also preferable to exercise on an empty rather than on a full stomach. On eating food, a large part of the blood is directed to the gut where the metabolism of the food occurs thus leaving less blood available for other body activities such as exercise which create stress on the heart.

#12

Diabetes types

- **Type 1 diabetes** also called IDDM (insulin dependent diabetes mellitus) is genetic and requires insulin to be injected in the patient's portal system periodically.
- **Type 2 diabetes** is a lifestyle disorder which develops later on in life and is treated through lifestyle rearrangement (diet, sleep, exercise) and oral medication.
- **Gestational diabetes** develops in the mother during the gestation period. It may be temporary or may persist forever. Those with gestational diabetes have a chance of developing type 2 diabetes in the future. The foetus may be effected in the form of jaundice.

#13

Drug dosage-duration relationship

- A judgement of the efficacy of the drug on a patient can only be passed once the drug has been administered for a certain number of doses over a certain period of time.
- It is finalized during clinical studies of drug development.

#14

Glasgow Coma Scale

There are 3 criteria. They have the following components and each component has a corresponding score

Eye Opening	Verbal Response	Motor Response
Spontaneous - 4	Oriented - 5	To Obey Command - 6
To Sound - 3	Confused - 4	Localise Pain - 5
To pressure - 2	Words - 3	Withdraw from Pain - 4
Never - 1	Sound - 2	Abnormal flex - 3
	None - 1	Extension - 2
		None - 1

The total score dictates the result: Mild = 13-15, Stupor = 9-12, Unresponsive Coma = 3-8

#15

UMN & LMN (lesion)

- **Upper Motor Neurons** arise from the cerebral cortex and extend to the spinal cord. In case of a UMN lesion there is an increase in the tone of the muscle i.e. the muscle becomes taught. This may lead to spastic paralysis. UMN lesions do not cause the power to be lost and instead cause exaggeration of reflexes. The Babinski's sign becomes positive and the clonus is present.
- **Lower Motor Neurons** originate from the the spinal cord and extend to the neuromuscular junction. LMN lesion causes the tone of the muscle to be lost thus leading to flaccid paralysis and reduction is reflexes. . LMN lesion causes loss of power. The Babinski's sign becomes negative and the clonus is absent.

#16

Signs of Drug Addiction

Drug addiction is a psychotic problem which can be identified through the following 3 signs

- **Impulsivity** i.e. a need for instant gratification
- **Harm Reduction** i.e. feeling that the drug will reduce the intensity or eliminate the danger of any stressor
- **Reward Dependence** i.e. the feeling of relief one gets from the drug

#17

Day Time Residue & Dreams

- Out of all the experiences one faces in conscious state, some may give rise to queries or unwanted feelings which are repressed during the day.
- At night these content are manifested in the form of dreams when one is unconscious.
- Only dreams seen during the REM sleep can be remembered when one wakes up and becomes conscious again.

#18

What makes Alcohol Withdrawal Dangerous

- Alcohol and sleeping pills both are depressants i.e. on intake they slow down the system.
- When one withdraws from the use of alcohol and sleeping pills, there is a decrease in the seizure threshold thus making the person vulnerable to seizures and epilepsy due to the easy misfiring of neurons.

#19

Amotivational Syndrome & Cannabinoids

- Cannabinoids contain THC (tetra hydro cannabinol) which bind to the cannabinoid receptors in the body. This causes an increase in the dopamine level providing pleasure. Once the individual becomes used to this reward (of pleasure), they get addicted to cannabinoids.
- Amotivational syndrome highlights how cannabinoid users are very likely to be passive, apathetic, less productive and emotionally numb. They also lack goal directed behaviour and have difficulty in focusing.

#20

Biopsychosocial Welfare Model

4 Ps	Biological	Psychological	Social
Predisposing	Genetic vulnerabilities, birth complications, organic brain issues	Attachment style, personality, childhood fears	Domestic violence, poverty, unstable family
Precipitating	Iatrogenic reactions, sleep, substance abuse	Recent loss, fears, stress	Educational or work stress, loss of significant relation
Perpetuating	Poor medication, chronic illnesses	Personality, coping mechanism, beliefs	Role of stigma to access treatment, ongoing transition
Protection	Diet, sleep, physical exercise, proper medication	Insight, cognitive-behavioural strategies, improved coping mechanism	Community help, family support, financial support, GP (good practitioner) support

#21

Positive Symptoms of Schizophrenia

- **Hallucinations** which may be auditory (most common), tactile, visual, olfactory, gustatory or visual. Tactile, visual, olfactory, gustatory indicate brain injury.
- **Delusion**, a convicted belief, which may be of persecution of reference, of control or of grandeur.
- **Confused thinking and speech** which involves formal thought disorders, loose associations, derailment, neologisms or preservation.

#22

Negative Symptoms of Schizophrenia

(Also referred to as the 5As)

- **Affect** that involves flat affect, blunt affect or inappropriate affect
- **Apathy** i.e. indifference
- **Alogia** i.e. poverty of speech
- **Avolition** i.e. inability to pursue goals
- **Anhedonia** i.e. inability to experience pleasure

#23

Catatonia

- It is also called akinetic mutism.
- It refers to a state of no movement or no speech.
- The root cause is organic.
- It can be treated by administering benzodiazepines as they are muscle relaxants and help in breaking the posture and producing speech.

#24

Use v/s Abuse v/s Dependence

- **Use** refers to a one time or casual use of any substance.
- **Abuse** refers to repeated or more frequent use of the same substance which produces adverse effects.
- **Dependence** refers to an irresistible pattern of compulsive usage of the same substance leading to the building up of a tolerance for it as well as showing withdrawal symptoms on discontinuation.

#25

Types of Bipolar Disorders

- **BPD 1:** It involves at least one manic episode. The manic episode is severe and this type leads to hospitalisation of the patient.
- **BPD 2:** It involves either no manic episode or hypomania but prolonged periods of depression. It is often mistaken for unipolar depression.
- **Mixed Episode:** It involves simultaneous symptoms of opposite polarities. Symptoms like high energy, racing and sleeplessness coexist with hopelessness, irritability and suicidality.
- **Cyclothymia:** It involves alternation of hypomania and brief depression. It can eventually lead to personality disorders.

#26

Switch

- It refers to a quick change from depression to manic state.
- It is caused due to steroids and anti-depressants.

#27.1

Personality Disorder & their Clusters

Personality disorders are inflexible, maladaptive, dysfunctional and enduring patterns of an individual which causes discrepancy in self and interpersonal relations. There are 3 clusters of personality disorders.

#27.2

Cluster-A disorders

- **Paranoid Personality Disorder** which is characterised by a fear of persecution and difficulty in trusting.
- **Schizoid Personality Disorder** which is characterised by the thought that relationship gets in one's way of life thus leading to reduced interpersonal relationships.
- **Schizotypal Personality Disorder** which is characterised by eccentric behaviour, speech problems and delusions.

#27.3

Cluster-B disorders

- **Antisocial Personality Disorder** which is characterised by acting in ways that are unpleasant to others and not feeling guilty about the same.
- **Emotionally Unstable Personality Disorder** which is characterised by lack of a stable mood. A subtype is the **Impulsive Personality Disorder** which involves an individual's need to be the focus of attention, to the point of engaging in dangerous activities for the same.
- **Histrionic Personality Disorder** which is characterised by an overwhelming urge to entertain others.
- **Narcissistic Personality Disorder** which is characterised by considering self to be superior and unique even in the absence of solid self-esteem.

#27.4

Cluster-C disorders

- **Avoidant Personality Disorder** which is characterised by a fear of judgement and hypersensitivity to rejection thus causing one to avoid social clusters.
- **Obsessive Compulsive Personality Disorder** which is characterised by preoccupation with control, cleanliness and organisation.
- **Dependent Personality Disorder** which is characterised by low self esteem causing one to be passive and submissive.

#28

Alcohol & Delusion of Infidelity

- Alcohol induced psychotic disorders involve both hallucinations and delusions of both persecution and infidelity.
- Delusion of infidelity is prominent in males.
- It is also called the Delusional Jealousy Syndrome.

#29

Somatic Symptoms (Anxiety & Depression)

- It refers to physical symptoms that results in distress, in the form of excessive thoughts and feelings, and behavioural problems causing difficulty in functioning.
- Somatic symptoms of anxiety include abdominal pain, dyspepsia, chest pain, fatigue, headache, dizziness and insomnia.
- Somatic symptoms of depression include appetite disturbance, sleep disturbance and fatigue.

#30

Ego Syntonic & Ego Dystonic

- Ego syntonic refers to instincts and ideas that are acceptable to self and are compatible with ones values, ways of thinking, fundamental personality and beliefs. All psychotic and personality disorders are ego syntonic.
- Ego dystonic refers to thoughts, impulses and behaviours that are repugnant and unacceptable with self. All neurotic disorders are ego dystonic.

#31

Prevalence Rate & Incidence Rate

- Prevalence rate refers to the proportion of people having a condition during a specific time period. (old cases + new cases)
- Incidence rate refers to the proportion of people who develop a condition over a particular period of time (new cases only)

#32

Symptom Substitution

- It refers to more than one struggles, from the same root cause, in a way that the betterment of one symptom is followed by the worsening of another.

#33

Delusion v/s Superstition

- **Delusion** refers to fixed, firm, false beliefs of morbid origin that are not shakable by logic, reasoning or contradicting evidence and are not shared by other members of the community and are unrelated to the socio-occupational background of the individual.
- **Superstition** refers to fixed, firm, false beliefs of morbid origin that are not shakable by logic, reasoning or contradicting evidence and are shared by other members of the community.

#34

Hallucination v/s Illusion

- **Hallucination** refers to perception in the absence of stimulus from external objective space, has real life like quality and occurs in clear sense.
- **Illusion** refers to the misinterpretation of stimulus from an objective space.

#35

Non-Morbid Hallucinations

Only 2 hallucinations are not of morbid origin

- **Hypnagogic** i.e. hallucination that one sees while going to sleep.
- **Hypnopompic** i.e. hallucination that one sees while waking up.

#36

Typical v/s Atypical Depression

- Typical depression is characterised by a prolonged and constant feeling of sadness and hopelessness.
- Atypical depression is characterised by sadness with temporary mood brightening as a result of positive events. It begins at an earlier stage of life and lasts longer. The name comes from its symptoms which are contrary to the expected symptoms of depression. Its symptoms include increase in appetite or significant weight gain, hypersomnia, leaden paralysis and increased sensitivity to criticism.

#37

Bedside Measure of Intelligence

- General fund of knowledge
- Mathematical ability (asking questions which are age and education appropriate)
- Abstract thinking and concept forming
 - Proverb testing i.e. asking patient to elaborate the underlying meaning of proverb said
 - Similarity - Dissimilarity test i.e. asking patient to find the dissimilarities and similarities between said object. Dissimilarity is given more marks than similarity as the latter is easier.

#38.1

Jean Piaget's Stages of Development

Jean Piaget stated that children are active participants of their development as they build their cognition with increasing perceptual and motor abilities.

1. Sensorimotor Stage (birth - 2 years)

- Substage is characterised by newborn reflexes such as sucking and grasping. They look at everything/ everyone in the same way.
- Substage 2 is characterised by primary circular reactions to get voluntary control over actions. Children repeat behaviours for basic needs and can categorise perceptually similar stimuli.

#38.2

- Substage 3 is characterised by secondary circular reactions i.e. to repeat interesting events cause by their own action. Children can categorise functionally and behaviourally similar stimuli.
- Substage 4 is characterised by goal directed behaviour. Children begin to understand object permanence but show A-B search error.
- Substage 5 is characterised by tertiary circular reaction, A-B search accuracy as well as beginning of problem solving
- Substage 6 is characterised by mental representations and finding solutions by mental activity and not simple trial and error. Invisible displacement is also mastered.

#38.3

2. Preoperational stage (2 - 7years)

- It is characterised by make believe play which eventually becomes more symbolic and complex.
- Drawing progresses from scribbles to primary representations including boundaries and minor details to realistic figures with depth perception.

#38.4

3. Concrete Operational (7 – 11 years)

- It is characterised by the beginning of content formation
- Children understand conservation.
- They also undergo decentrism promoting flexibility of thought.
- Mental reversibility of steps becomes possible.
- Spatial reasoning of familiar spaces such as own home, neighbourhood and school is also possible.

#38.5

4. Formal Operational (11 years or older)

- It is characterised by hypothetico deductive reasoning.
- There is an increase in abstract thought which causes self consciousness (imaginary audience and personal fable), self's ideal world versus parent's realistic world clashes and impulsive benefit-risk measured decision making.

#39

Monoamine Oxidase (MaO) Inhibitors

They are of three types:

- Non-Selective MaO inhibitors such as phenelzine and ipronizid which creates wide range of adverse side effects such as hypertensive crisis, liver toxicity and hemorrhage.
- MaO-A inhibitors are used to treat psychotic disorders. They are mostly distributed in the gut, liver and placenta. They may be reversible (bazabenide, maclobenide) or irreversible (iproclazide).
- MaO-B inhibitors are used to treat neurotic disorders. They are mostly distributed in the brain, liver and platelets.

#40

Precautions while administering MaO Inhibitors

- Avoid administering the MaO inhibitors while the patient is already being administered with SSRIs. There must be at least a two week refreshing period between the administration of SSRI and that of the MaO inhibitor. If not followed, it may lead to excessive serotonin in the body (serotonin syndrome).
- While MaO inhibitors are being administered avoid food with high tyramine levels (soy, cheese, cured meat)
- MaO inhibitors must not be administered to pregnant women as they may cross the placenta and affect the foetus.

#41

Grades of Insight

- **Grade I:** Complete denial of illness
- **Grade II:** Slight awareness of being sick and needing help but denying it.
- **Grade III:** Awareness of being sick but blaming it solely on external events.
- **Grade IV:** Intellectual Insight i.e. admission of illness and recognition of symptoms without understanding the future.
- **Grade V:** True emotional insight i.e. awareness of motives and feelings within and understanding meaning of the symptoms.

#42

Conversion Dissociative Disorder

- It is also referred to as Fundamental Neurological Disorder.
- An individual has problems like blindness, paralysis or other neurological symptoms that cannot be explained by medical evaluation. These symptoms may be caused by psychological conflict.
- People with medical illnesses, dissociative identity disorder and personality disorder are most vulnerable to this.

#43

PICA

- It is a condition in which a person compulsively eats things that may or may not be edible and do not have any nutritional value.
- It may be due to culture, stress or anxiety, negative childhood conditions like poverty, nutritional deficiency (e.g. eating paint or chalk in case of iron deficiency), mental health conditions and medical conditions (such as pregnancy or sickle cell anemia).

#44

Depersonalisation v/s Derealisation

- Depersonalisation refers to the detachment from thoughts feeling and body. The patient has insight that the feeling is not real.
- Derealisation refers to the detachment from the environment. The patient does not have any insight and accepts the distorted reality.

#45

Gains of a Patient

- **Primary Gain:** It produces a positive internal motivation and includes a component of a disease. In this case the 'gain' is not visible to other observers.
- **Secondary Gain:** It is also referred to as 'Secondary Handicap'. It produces an external motivation and also includes a component of a disease
- **Tertiary Gain:** It involves benefit of third party from the patients symptoms and gaslighting someone to believe that they are ill.

#46

Illness Behaviour

It is the belief that one is threatened by illness and needs protection initiated by somatic experiences and physical functioning which are interpreted as symptoms of an underlying disease. In this case the 'symptoms' faced match with the schema of the illness.

The severity, duration and perceived meaning will determine the methods of symptom management.

Abnormal Illness Behaviour refers to the belief of being sick and overuse of medical care in the absence of objective symptoms.

#47.1

Types of Eating Disorders

- **Anorexia Nervosa:** It is characterised by viewing self as overweight due to poor self esteem and distorted body image, constant weight monitoring and severely restricted food intake.
- **Bulimia Nervosa:** It is characterised by binge eating large amount of food with no control and then compensating for the same by purging the food as a fear of weight gain.
- **Binge Eating:** It is characterised by intake of large amounts of food with no control and feeling shameful about eating.

#47.2

- **Pica:** It is characterised by compulsive eating of things that may or may not be edible and do not have any nutritional value.
- **Rumination Disorder:** It is characterised by regurgitation of food previously chewed, re-chewing it and neither swallowing nor spitting it out. It usually occurs within first thirty minutes of the meal. This disorder generally comes up and disappears on its own within 3-12 months of birth.
- **Avoidant/ Restrictive Food Intake Disorder:** It is characterised by disturbed eating due to lack of interest in food stemming from the food's odour, texture, colour, taste or temperature.

#48

Hypervitaminosis A

- Vitamin A is fat soluble and thus persist in the body for a long time. Too much Vitamin A in the body is called Hypervitaminosis A.
- Vitamin A poisoning could be
- **Acute:** Hundred thousand IU level with symptoms like drowsiness, irritability, abdominal pain, nausea or skin peeling off.
- **Chronic:** regular intake of more than 25,000 IU with symptoms like alopecia, coarse hair, rough skin and dry eyes.

#49

Oxygen Intoxication

- This condition is caused due to breathing of oxygen at higher than normal partial pressure level.
- It is also called Hyperoxia.
- It affects the CNS causing symptoms like disorientation, irritability and increased anxiety.
- It also affects the pulmonary system thus generating breathing problems.
- It also affects the ocular system and causes increased chances of myopia and cataract formation.

#50

Water Intoxication

- This condition is caused due to over drinking of water causing electrolyte imbalance.
- Too much water can dangerously decrease the sodium levels and cause symptoms like nausea, confusion, seizures, coma or even death.
- Risk factors for this condition involve low body mass of infants, marathon runners and people with psychological conditions like polydipsia.
- Its treatment involves fluid restriction and administering IV fluids rich in sodium.

#51

'Jamais Vu' Phenomenon

- It literally translates to 'never seen'
- It is the feeling of being unfamiliar to a person or situation which they are actually familiar with and have encountered before.

INSIGHT

“The experience was very insightful for me. It helped me gain theoretical knowledge which can be applied in practical clinical settings. The internship under Dr. Rahul Murada, Neuropsychiatrist, The Neptune Hospital, New Delhi, provided me an opportunity to learn new concepts.”

SHOUMILEE RAY

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