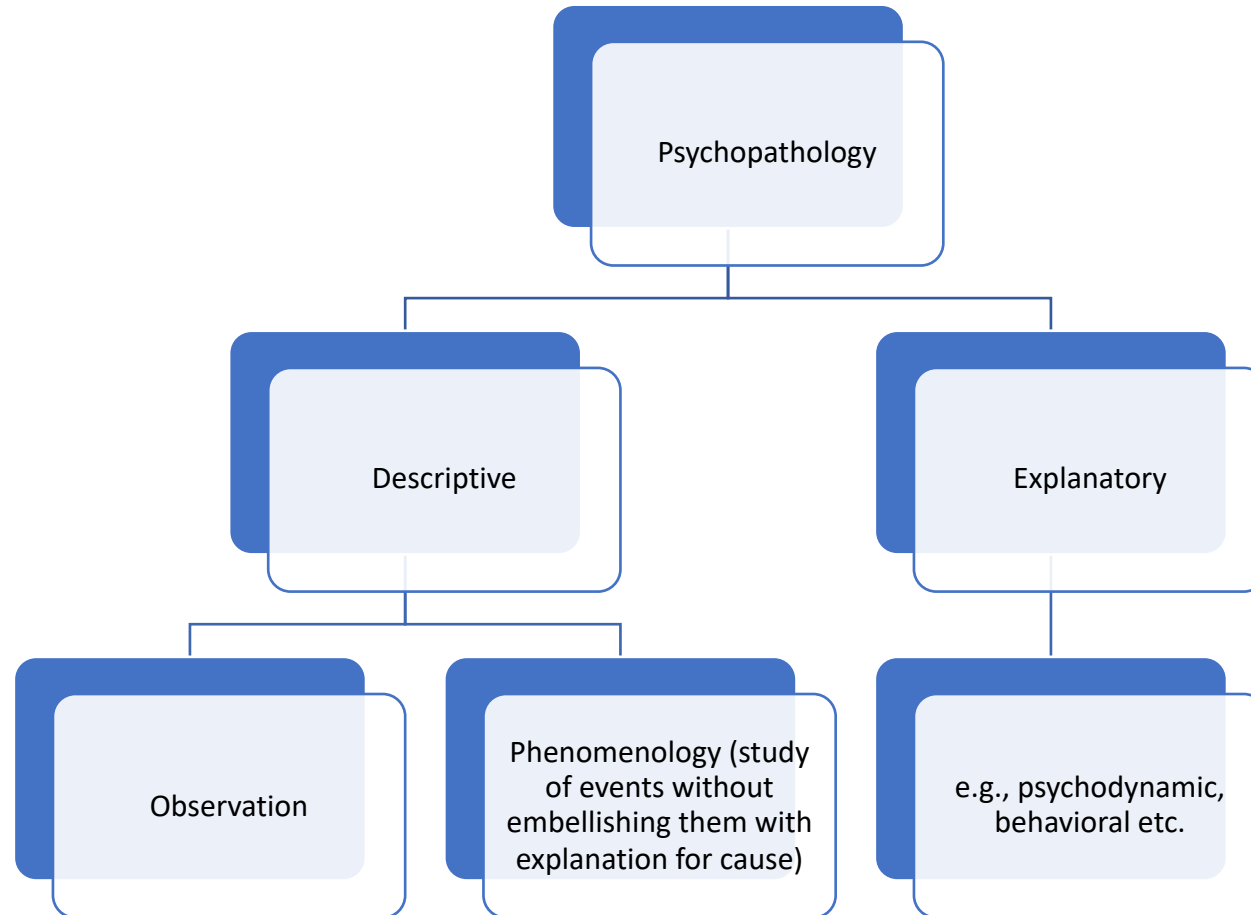


Mental Status Examination

MSE

introduction



Introduction

- Symptom: Patient's description of an abnormal mental phenomenon including his complaints about what distresses him or describing an experience that may sound pathological to observer (e.g., "aliens planting chips in my head")
 - Primary → Immediate result of the disease process (e.g., hallucinations)
 - Secondary → psychological elaboration of or reaction to primary symptoms (e.g., delusional elaborations, disturbed relationships with other people)

Introduction

- Sign: Indication of psychological condition that can be objectively observed, by someone other than the patient (e.g., muttering to self)
- Syndrome: Constellation of signs and symptoms that are unique as a group
 - May include symptoms which occur in other syndromes, but it is this particular combination of symptoms that make this syndrome unique

Introduction

- MSE is a screening evaluation for all areas of patient's emotional and cognitive functioning
- Systematic collection of information
- Purpose - obtain evidence of symptoms and signs of mental disorders, that are **present at the time of the interview.**
- During the MSE, the patient might also mention past symptoms and signs, but these should be recorded under the history of the present illness

Introduction

- Includes:
 - Observation of verbal and non-verbal behavior
 - Patient's description of his/her own behavior
 - Interview and testing
- Keep in mind
 - Age of individual
 - Cultural background

General Appearance and Behavior

- OBSERVED
- Examiner should paint a portrait with a description that captures unique features and affords the reader a clear mental image of the patient
- Aspects of appearance to be noted
 - Gait
 - Posture
 - Grooming, hygiene and dressing
 - Body-built
 - Looking age appropriate- younger or older
 - Level of consciousness (e.g, vigilant, alert, drowsy, lethargic, stuporous, asleep, comatose, confused, fluctuating)
 - Facial expression (e.g., perplexed, tense, frightened, impassive, mask-like, interested etc.)

General Appearance and Behavior

- Aspects to note in behavior
 - Rapport
 - Eye to eye contact
 - Came by self/bought by others
 - Attitude towards examiner (e.g, cooperative, hostile, open, secretive, evasive, suspicious, apathetic, easily distracted, focused, defensive)
- Aspects to note in motor behavior
 - Any abnormal motor movement (mannerisms, tics, hyperactivity, tics, echopraxia, waxy flexibility, posturing, akathisia, tremors)
 - Psychomotor activity – motor movements related to affect (increased, retarded, gestures)

General Appearance and Behaviour

- Useful information to make comparisons across serial MSEs
- May give clue to diagnosis
- For example,

“ Mrs R was brought to the current setting by her son and daughter-in-law. She entered the interview room reluctantly. During the interview, she was restless, rising frequently from her chair, looking at every painting on the walls, making comments about each of them, doing essentially all the talking during the interview. She looked her stated age of 53, but her clothes would have been appropriate only for a much younger person. Although quite obese, she wore orange “hot pants” and a halter top that showed a bare midriff. She wore old wooden beach sandals with high spike heels. However, her general level of grooming was very poor: Her short gray hair was matted on both sides of an irregular part. Her fingernails were long and yellowed from nicotine; her toenails were also very long, each painted a different color.”

Speech

- OBSERVED
- Not an evaluation of language or thought, but a behavioral/mechanical evaluation of speech.
- Includes:
 - Quantity (e.g, Talkative, spontaneous, expansive, paucity, poverty)
 - Coherence/incoherence
 - Relevance (answers questions relevantly)
 - Pitch (variations in spoken speech-normal, high)/ Tone (how speech “appears” e.g., soft spoken, monotone)/Volume/loudness (e.g., Loud, soft, monotone, weak, strong)
 - Rate (e.g., Fast, slow, normal, pressured)
 - Reaction time
 - Fluency (hesitant, slurred, stuttering, stammering, aphasia)

Speech

- Important to understand whether deficit in speech is result of organic brain damage or psychiatric issues
- Clinical relevance
 - Manic patients often will interrupt or respond without pause with rapid, pressured speech that parallels racing thoughts
 - Aphasic speech vs disturbed speech in schizophrenia: inconsistency in speech disturbance, presence of other pathognomic signs, ability to follow simple instructions, name objects or repeat simple phrases.

Mood and Affect

- OBSERVED
- Mood: Pervasive and sustained emotion that colors the person's perception of the world (internal)
 - Subjective
 - Objective – Robinson's Model
 - Euthymic
 - Dysphoric
 - Euphoric
 - Angry/irritable
 - Apprehensive
 - Apathetic

Mood and Affect

- Affect: External expression of emotion, inferred from patient's facial expression and behavior
 - Appropriateness: how well the patient's affect matches the circumstances and topic of discussion. Affect is *congruent* if emotional expression matches patients' description of their mood and other verbalizations.
 - Range: breadth of emotional expression demonstrated. Can be normal/full showing varied emotions as topics of discussions shift. Can be on either extremes of restricted or labile.
 - Intensity: strength of emotional response. Normal intensity is defined in both normative and contextual terms. Patient can deviate in either directions from median
 - Responsiveness: Normal intensity is defined in both normative and contextual terms

Mood and Affect

Quality of Affect	Normal	Abnormal
Appropriateness	Congruent with context	Incongruent with context
Range/variability	Full, shows changes	Restricted/constricted/Labile
Intensity	Strength of emotional response typical for social interactions Animated	Flat Blunted Exaggerated
Responsiveness	Reacts appropriately to changes in context	Nonreactive Unresponsive Extreme reactions

Thinking and Thought Disorders

- **Thinking: Goal-directed flow of ideas and associations initiated by a problem and leading toward a reality-oriented conclusion. A very complex and complicated psychic function.**
- **Thought disorder:**
 - **any disturbance of thinking that affects language, communication, or thought content**
 - **the hallmark feature of schizophrenia**
 - **manifestations range from simple blocking and mild circumstantiality to profound loosening of associations, incoherence, and delusions**

Thought and Associated Disorders

- Assessed through questioning and Observed
- Internal dialog that occurs in the patient's mind
- Thought Disorders primarily divided into:
 - Process/form of thought disorder
 - Content
- Can also be divided as:
 - Process/form
 - Stream
 - Content
 - Control of thinking/possession

Process/form of Thought

- Formulation, flow, and organization of thought (Robinson, 2001)
- Assessment???
- Includes:
 - Circumstantiality
 - Tangentiality
 - Flight of ideas
 - Derailment
 - Clang Association
 - Word Salad
 - Neologism
 - Perseveration

Process/Form of Thought

- Circumstantiality: mildest form of thought disorder (and a personal style of many otherwise normal people). Responses are over-elaborative, include much more detail than necessary but eventually get to the point and ultimately are relevant.
 - E.g.: begin with a detailed description of a conflict 10 years ago with his mother “where it all began” and give excruciating detail of ensuing events.
 - may reflect normal conversation style, obsessive thinking, anxiety, or below average intelligence
 - Clinically found in dementia and temporal lobe epilepsy

Process/Form of thought

- Tangentiality: train of thought that strays from the original topic and never returns; the thoughts generally are logical, but digress from the target and at best are minimally relevant
 - For example: On being asked if the patient had any troubles sleeping? He answers, “Sleep has always been an issue. I usually sleep on my bed, but these days, I am sleeping on the sofa.”
 - Does not have a psychiatric significance in itself.

Process/Form of thought

- Flight of Ideas: Succession of multiple associations so that thought appears to move abruptly from idea to idea.
 - Often expressed through pressure of speech
 - Ideas change continuously due to frivolous affect and easy distractibility
 - Common in mania
 - In hypomania: a milder form may be present – “Prolivity”
 - E.g. “they thought I was in the kitchen with Lata. Lata is a very good singer. Singer cannot afford to eat ice. I love ice. Ice melts in hot temperature. Delhi has become very hot these days. Days are just flying away. I love flying in an airplane....”

Process/Form of Thought

- Loose Association/Derailment: Breakdown in both logical connection between ideas and overall sense of goal-directedness.
 - Words make sense, sentences do not.
 - Commonly seen in schizophrenia
 - For example, ""My name? Well, I'd tell you my name except for the weather, which is humid. Hot weather really bothers me, makes me want to paint my car blue. I got fired last week. Chocolate is my favorite flavor of pudding. centrally planned economies will always fail because no one can regulate the temperature in that room you're going to admit me too.""

Process/Form of Thought Disorder

- Word Salad: most extreme form of thought process disturbance in which even the logical association between words is lost and the patient's speech is a jumble of meaningless words and nonsense words.
 - Have to be distinguished from fluent aphasia
 - Sure-shot sign of schizophrenia. Also known as schizophasia
 - Example, "It was shockingly not of the best quality I have known all such evildoers coming out of doors with the best of intentions!"

Process/Form of Thought Disorder

- Neologism: Invention of new words or phrases or use of conventional words in idiosyncratic ways.
 - For example, “The only problem I have is my frustionating!”
 - Commonly seen in schizophrenia; need to be distinguished from aphasia
 - Keep into mind socio-cultural context.

Process/Form of Thought

- Clang Association: Thoughts are associated by sound of words, rather than their meaning.
 - For example, “He went in entry in trying tieing sighing dying ding-dong dangles dashing dancing ding-a-ling!”
 - Another example, ““My pants are too loose. You must be Toulouse Lautrec. I think I’ve seen you on Star Trek.”
 - Commonly seen in schizophrenia

Process/Form of Thought

- Perseveration: repetition of a word, phrase, or idea resulting from failure to properly inhibit and cease a response when it no longer is appropriate.
 - Example
 - Can be found in both organic brain disorders or schizophrenia

Possession of Thought

- Also known as thought alienation
- Includes:
 - Thought insertion
 - Thought withdrawal
 - Thought blocking

Possession of Thought

- Made phenomenon/passivity
 - Passivity of emotions: patient's affective experiences does not seem to be his/her own. He complains of being "made to feel it."
 - Passivity of impulses/made drives: Patient complains of "being made" to act on an impulse or a drive
 - Passivity of volition: Patient complains that he is "being made" to carry out actions
 - Somatic passivity: Outside influences are playing on the body. A delusional belief that body is being influenced from outside the self.

Content of thought

- Meaning conveyed by ideas
- Inquired and Observed
- Possible questions for patient:
 - “What do you think about when you are sad/angry?”
 - “What’s been on your mind lately?”
 - “Do you find yourself ruminating about things?”
 - “Are there thoughts or images that you have a really difficult time getting out of your head?”
 - “Are you worried/scared/frightened about something or other?”
 - “Do you have personal beliefs that are not shared by others?”
 - “Do you think someone or some group intend to harm you in some way?”

Thought Content

- Obsessions and verbal compulsions
- Over-valued ideas
- Delusions
 - Primary delusions (not very clear-cut, systematized, firm)
 - Delusional mood
 - Delusional perception
 - Delusional ideas
 - Secondary delusions (firm, systematized, due to some morbid phenomenon)
 - Bizarre
 - Non-bizarre

Thought Content

- Obsessions:
 - persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate and that cause significant anxiety or distress
 - Ego dystonic
- Phobia: Irrational fear of an object or situation that, usually, is not threatening
 - Agoraphobia
 - Social phobia
 - Specific phobia
- Other ideas: hopelessness, helplessness, worthlessness, suicidal, homicidal, death wishes)

Thought Content

- Over-valued ideas (Wernicke, 1906)
 - Solitary, abnormal belief that is neither delusional, nor obsessional in nature, but which is preoccupying to the extent of dominating patient's life
 - Can cause distress to self/others
 - Not false
 - Vs obsession: not termed as "senseless"
 - Vs delusions: isolated notion with string affect and abnormal personality. Akin to passionate political, religious or ethical conviction

Thought Content - Delusions

- Delusions
 - firm, fixed idea or belief
 - Out of keeping with patient's educational, cultural and social background
 - Held with extraordinary conviction and subjective certainty
 - Arises out of internal, morbid processes
- According to Jaspers (1959)
 - Delusion as perverted view of reality, incorrigibly held. Three components:
 - Held with unusual conviction
 - Not amenable to logic
 - Absurdity or erroneousness of content is manifest to others

Thought Content- Delusions

- Kendler (1983)
 - Conviction: degree to which patient is convinced of reality of delusional belief
 - Extension: degree to which delusional belief involves various areas of patient's life
 - Bizarreness: degree to which delusional belief is "un-understandable"
 - Disorganization: degree to which delusional beliefs are internally consistent, logical and systematized
 - Pressure: degree to which patient is preoccupied with expressed delusional beliefs
 - Deviant behaviors: acting out

Thought Content- Delusions

- Primary delusions: not occurring in response to another psychopathology, e.g., mood disorder
- Secondary delusions or delusion like ideas: “understandable” in present circumstances. Can be traced for their origin to circumstances, mood states, personality or social beliefs. Needs elaborate and comprehensive history

Thought Content - Delusions

- Types of primary delusions
 - Autochthonous delusion/intuition: Arising “out of the blue”. Phenomenologically, indistinguishable from sudden arrival of a new idea.
 - Delusional percept: attribution of new meaning, usually in self- reference to a normally perceived object.
 - Two-memberedness
 - Vs. delusional misidentification

Thought Content - Delusion

- Delusional atmosphere/mood: patient has knowledge that there is something going around him that concerns him, but he does not know what it is.
 - Experiencing everything around him as sinister in an undefined kind of way
 - Similar to prodromal phase in schizophrenia
 - Patient feels perplexed, apprehensive and may actually be relieved when a systemized delusion is formed
- Delusional memory: delusion retrojected in time. Event that happened in past is remembered in a delusional way. For example, woman with memory of seeing a “sad man”
- Difficult to distinguish various primary delusions

Thought Content - Delusions

- Stages in development of delusions (Conrad):
 - Trema: delusional mood
 - Apopheny: search for and finding new meaning for events
 - Anastrophy: heightening of psychosis
 - Consolidation: Forming of a new world or psychological set based on new meanings
 - Residuum: Eventual autistic state

Thought Content - Delusions

- Secondary delusions or delusion like idea
- Commonly found delusions:
 - Delusion of persecution
 - Delusion of infidelity/morbid jealousy
 - Delusion of love/erotomania
 - Grandiose delusions
 - Delusion of poverty/nihilism
 - Hypochondriacal delusions

Thought Content - Delusions

- Other types of delusions
 - Delusional misidentification/face processing disorder
 - Capgras: someone close to patient has been replaced by imposter
 - Fregoli: strangers are taken to be familiar persons
 - Subjective doubles: another person has been psychologically/physically transformed into the patient
 - Delusion of infestation/Ekbom's syndrome: Patient believes he is infested with small, microscopic organisms

Perception

- Sensory distortion: Changes in perception due to changes in
 - Intensity of stimuli. E.g., hyperesthesia
 - Quality of stimuli: usually seen in hallucinogens
 - Spatial form of perception: micropsia or macropsia
- Sensory deception
 - Illusions
 - Hallucinations and pseudo-hallucinations

Perception - Illusions

- Stimuli from a perceived object + mental image = false perception
- Various types
 - Completion illusion: “Closure” principle of gestalt
 - Affect illusions: affected by mood. E.g. shadows in alley
 - Pareidolic illusions: seeing images from shapes (e.g. children and clouds)

Perception - hallucination

- “A perception without an object” (Esquirol, 1817)
- Three operational criteria for hallucination (Slade, 1976)
 - Percept-like experience in absence of external stimulus
 - Percept-like experience which has full force and impact of a real perception
 - Percept-like experience that is unwilled, occurs spontaneously and cannot be readily controlled by the client

Perception - Hallucination

- Characteristics (Horowitz, 1975):
 - Occur in form of images
 - Derive from internal sources of information
 - Appraised incorrectly as if from external sources of information
 - Usually intrusive

Perception - Hallucination

- Similar to true percept, which is:
 - Substantial
 - Appears in objective space
 - Clearly delineated
 - Constant and independent of will
 - Full and fresh sensory element
- Different from mental image, which is:
 - Incomplete
 - Not clearly delineated
 - Dependent on will
 - Inconstant and have to be re-created

Perception - Hallucinations

- Vs Pseudo-hallucinations
 - Type of mental images, which are clear and vivid
 - Lack the substantiality of perception
 - Seen in full consciousness
 - But located in subjective space

Perception - Hallucination

	Hallucination	Pseudo-hallucination
Experience	Concrete, tangible, objective, real	“inner eye”, subjective
Location	Outer objective space	Inner subjective space
Definition	Definite outline, complete sound	- Same -
Vividness	Full, fresh, bright	- Same -
Volition	Not under voluntary control	Not under voluntary control
Insight	Has quality of perception	Has quality of idea
Relevance	Relevant to emotions, needs, actions	- Same -
Existance	Object exists independent of observer	Dependent on observer

Perception - Hallucinations

- Auditory : Most common
- Voices = phonemes
- Elementary or well-formed
- Types
 - Second person
 - Third person (talking about patient, running commentary)
 - Commanding (pathognomic sign of schizophrenia)
 - Thought echo

Perception - Hallucination

- Visual: Usually common in organic states such as tumors in occipital lobe, dementia
 - Elementary or well-formed
 - Liliputian hallucination
 - Anomalous perceptual experience: recognizing a face, but seeing it distorted. Usually seen in schizophrenia
 - Autoscopic: seeing oneself in external space. Variants include:
 - Negative autoscopia
 - Internal autoscopia

Perception - Hallucinations

- Hallucinations of bodily sensations
 - Superficial (e.g., sensation of hot and cold, dead body's hand touching, tingling sensation)
 - Kinesthetic (twisting of limbs, muscles, joints)
 - Visceral (involves inner organs, e.g., pain in uterus)
- Reflex hallucination: stimulus in one sensory field causing hallucination in another

Perception - Hallucination

- Extracampine hallucination: within outside limit of sensory field
- Functional hallucination: occurring at the same time as normal/true perception.

Perception - Hallucinations

- Olfactory
- Gustatory
- Hypnagogic
- Hypnopompic

Perception

- Illusions
- Hallucinations
- Pseudo-hallucinations
- Depersonalization
- Derealization

Perceptions

- “Do you ever feel detached/removed/changed/different from others around you?” • “Do things seem unnatural/unreal to you?” • “Do you ever see (visual), hear (auditory), smell (olfactory), taste (gustatory), and feel (tactile) things that are not really there, such as voices or visions?” (Hallucinations are false perceptions) • “Do you sometimes misinterpret real things that are around you, such as muffled noises or shadows?” (Illusions are misinterpreted perceptions)

Cognitive functions

- Orientation
- Attention and Concentration
- Memory
- Information and general intelligence
- Abstraction
- Judgment
- Insight

Orientation

- Inquired
- Awareness of personal identity, time, location, and circumstances
- Includes:
 - Time
 - Place
 - Person
- Clinical condition: Delirium, severe cases of dementia

Attention and Concentration

- Inquired
- Attention: ability to focus cognitive processing on the appropriate target and avoid being distracted by irrelevant stimuli.
- Concentration: sustaining attention over a longer period of time or manipulating and processing the contents of what is attended to
- Gateway
- Clinical conditions: traumatic, brain injury, cortical and subcortical dementias, delirium, ADHD, anxiety, depression, psychosis
- Observable signs: motor restlessness, attending to extraneous sounds, being distracted by stimuli and doing something else while the examiner is attempting to engage in conversation.

Attention and Concentration

- Tests
 - Digit repetition (can pick from PGI-MS)
 - 20-64 year old: 6-8 DF and 5-7 DB
 - Serial 7's (note more than 2 errors)
 - Days of the week backwards (no errors)

Memory

- Complex cognitive ability that involves the recall or recognition of previous experience
- formation of new memories involves recognition and registration of the initial sensory input, retention and storage of the information, and recall or retrieval of the stored information (Strub & Black, 2000)
- Inquired
- Clinical conditions: most commonly seen in brain dysfunctions like dementia

Memory

- Immediate: 4- object recall (e.g., (railgaadi, bindi, paisa, pen)
- Recent: Breakfast, dinner, who came to meet them yesterday, 4-object recall after 5 minutes
- Remote
 - Last to show deterioration
 - Asking personal historical facts. Needs corroboration
 - Historical facts (Independence? who succeeded X PM?)

Intelligence and General Fund of Knowledge

- Best demographic predictors of an individual's intelligence are education and occupation
- VAIS items
 - Shape of ball
 - Sunrise
 - Kuran/bible
 - 5 PMs of India
 - 5 rivers of India
- Arithmetic
 - $4+5 =$
 - If a man spends 7.50 out of 18 rupees, how much is left?
 - If two pencil costs rs 5, how much will 12 pencils cost?

Abstract thinking

- Capacity to recognize and comprehend relationships that are not immediately or concretely apparent
- Disturbance can be present in manner in which patients conceptualize ideas
- Concrete or literal thinking – limited use of metaphor without understanding its nuances

Abstract thinking

- Proverbs: Should be based on client's socio-cultural background. At least three should be given:
 - pet mein choohe daudna
 - nau-do-gyaarah ho jaana
 - naach na jaane aangan tedha
 - Doodh ka jala chaach bhi phoonk phoonk ke pita hai
 - Bhains ke aage been bajaana
 - Bagal mein chora, gaon mein dhindhora
- Similarities (apple-oranges, aeroplane-bird, katori-chammach). At least a 2-point response

Judgment

- Complex mental process whereby a person forms an opinion, makes a decision, or plans an action after first analyzing the issue and comparing choices with acceptable behaviours.
- Includes understanding of advantages and disadvantages of various options, the likely outcomes for self and others, what is morally right and wrong, and long-term consequences.
 - Test judgment (Inquired)
 - Social judgment - Observed (basic knowledge of social situation, knowledge of socially appropriate responses and ability to apply socially correct responses)
 - Personal judgment – Observed (understanding of situation, future plans)

Insight

- Consists of:
 - extent to which the patient recognizes he has a problem
 - Recognizes the nature and various elements of the problem
 - understands that the problem represents a departure from what is considered normal or at least desirable
 - Understands the negative effects of the problem for self and others and,
 - accepts the need for treatment (Scheiber, 2004; Robinson, 2001).
- Inquired during the interview

Insight

- Level 1: Complete denial
- Level 2: Slight awareness of being sick and needing help, but denying it at the same time
- Level 3: Awareness of being sick, but blaming it on others, on external factors
- Level 4: Awareness that illness is due to something unknown in patient
- Level 5: Intellectual insight: admission that he/she is ill and they symptoms are due to patient's own particular irrational feelings or disturbances without applying this knowledge to future experiences
- Level 6: Emotional Insight: Emotional awareness of motives and feelings within the patient and the important people in his/her life, which can lead to basic changes in behavior.