جامعة الملك سعود
King Saud University

MEDICINE 438's REVIEW OF

CLINICAL PSYCHIATRY

Etiology, Classification and Diagnosis in Psychiatry

Presented by: Dr. Ali Bahathig

Objectives

- To discuss the etiology of psychiatric disorders.
- To list the main classification systems for Diagnosis in psychiatry.
- To discuss the differences between ICD & DSM.
- To describe the differences between primary and secondary psychiatric disorders.
- To describe the differences between psychosis and neurosis.

ACADEMIC LEADER
TA
TARIQ ALANEZI

EDITING FILE

IMPORTANT | TEXTBOOK | LECTURER'S NOTES | EXTRA | GOLDEN NOTES

Etiology

◄ The Complexity of Etiological Factors

1. Time factors

- Causes are often remote in time from the effect they produce

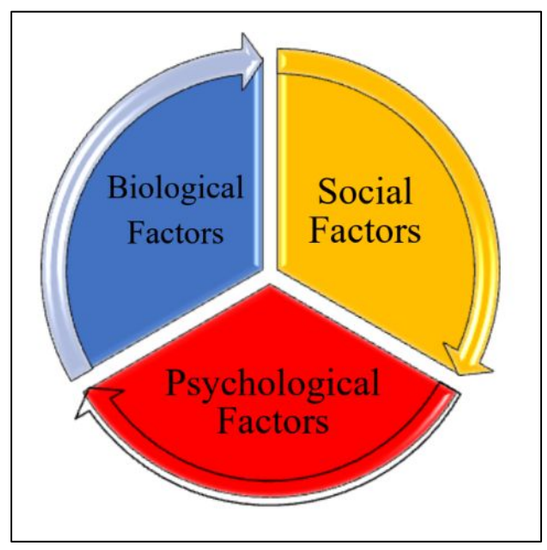
2. Single cause

- May lead to several psychological effects e.g. deprivation from parental affection may lead to depression or conduct disorder in children and adolescents

3. Single effect

- May arise from several causes e.g. depression may be due to accumulation of several causes like endocrinopathies, psychosocial stresses, and side effects of some drugs

◄ Etiology in Psychiatry

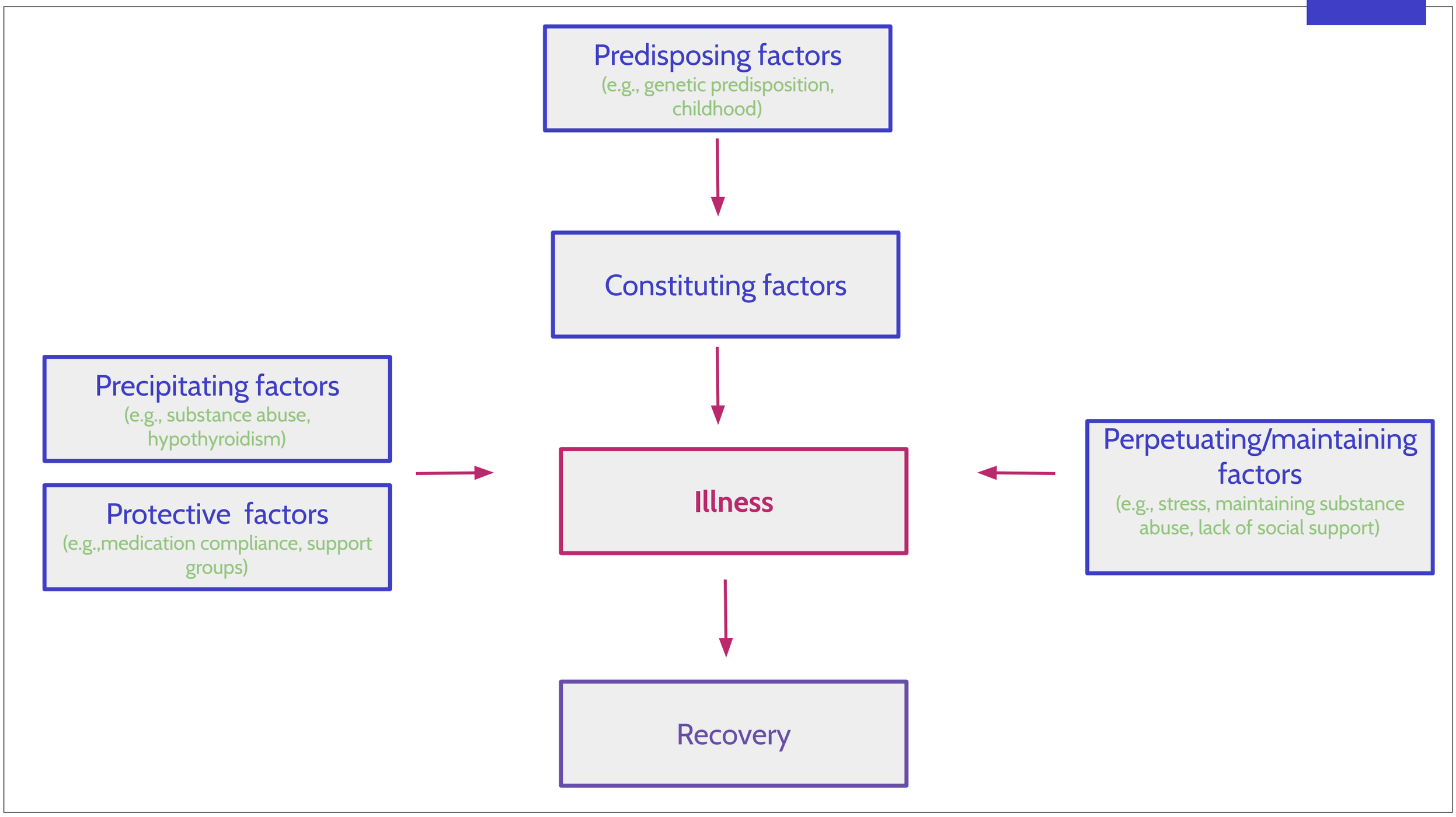


- Like other branches of medicine, etiology of primary psychiatric illnesses is usually **multifactorial**
- Etiological factors can be classified into **biological, psychological, and social factors**: Bio-Psycho-Social Approach (Engel 1977)
- Usually a combination of the three factors is required to produce a psychiatric illness.
- ADHD and bipolar have the highest degree of genetic association

Biological factors	Psychological factors	Social factors
• Genetic: e.g. in schizophrenia • Neuropathological: e.g. dementia • Endocrinological: e.g. hyperthyroidism (restlessness, anxiety)/ hypothyroidism[1] (CNS depression), parathyroid problems (hypercalcemia → CNS depression), Cushing's syndrome • Biochemical: the monoamine neurotransmitters (serotonin and the catecholamines) • Pharmacological: side effects of medications e.g. steroids (can cause euphoria early on in treatment and later mania, CNS depressants (benzodiazepines, anticholinergics, anticonvulsants) • Metabolic: e.g. DM (common cause in the middle east, falls under endocrinopathies as well) • Inflammatory including autoimmune disorders (SLE and rheumatoid arthritis)	• Thinking distortions (unreasonable response to a reasonable event, whereas automatic thought is a reasonable response to a reasonable event [e.g., thinking the worst upon receiving a late-night call from a friend) • Emotional dysregulation (patient can't control emotional responses whether it's in a positive or negative way) • Behavioral problems (such as avoidance and addiction. Most common behavioural problem leading to psychiatric issues is addiction) • Unconscious conflicts (Freudian beliefs of having subconscious restrained desires)[2] • Others	• Family factors: lack of social support, criticism, and over protection within the family • Life events: migration, unhappy marriage, problems of work, school, financial issues

FOOTNOTES

1. Neuropsychiatry link: Thyroid hormones sensitize the brain to the actions of catecholamines (NE) → NE promotes arousal (part of the reticular activating system [locus coeruleus], the system that manifests wakefulness) → absence of thyroid hormones will therefore lead to depression, overactivity will lead to restlessness.
2. In reference to Sigmund Freud, the founder of psychoanalysis.



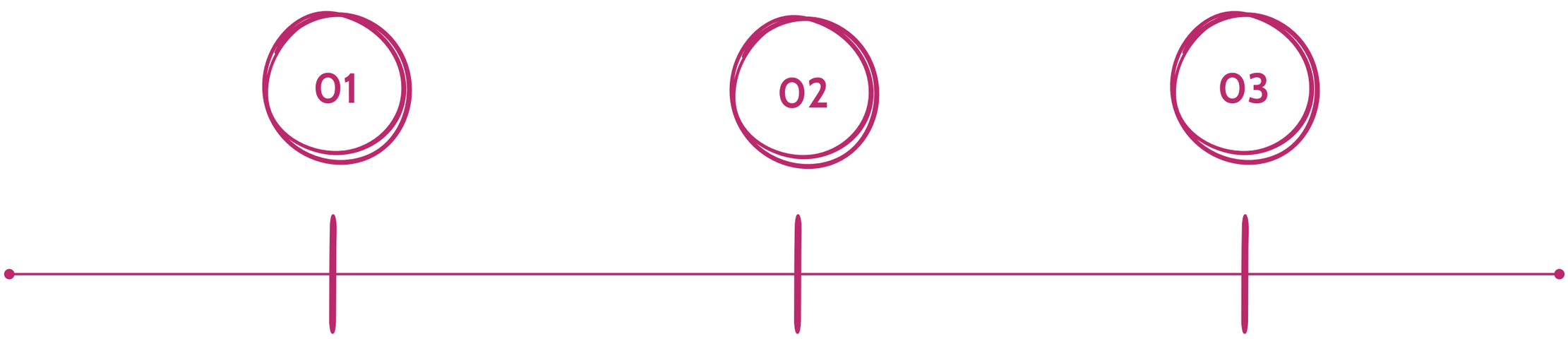
◄ The 4P Factor Model (You are not expected to memorize these)

4P Factor Model	Biopsychosocial Approach		
	Biological	Psychological	Social
Predisposing	Genetic vulnerability, toxic exposure in utero, birth complications, traumatic brain injury	Attachment style, personality traits, isolation, insecurities, fear of abandonment since childhood	Domestic violence, poverty and adversity, unstable home life, divorce
Precipitating	Iatrogenic reaction, poor sleep, substance use/misuse	Recent loss, stress, reexperience abandonment/fears	School stressors, loss of significant relationship, loss of home
Perpetuating	Poor response to medication, chronic illness/pain	Personality traits, coping mechanism, beliefs of self, others and the world	Role of stigma to access treatment, poor finance, ongoing transition
Protective	Adequate diet, sleep, good genes, physical exercise, resilience, intelligence	Insightful and cognitive behaviour strategies, coping skills, psychologically minded	Community, family and faith support, financial or disability support, GP support

	Predisposing	Precipitating (Stressors/Triggers)	Perpetuating
Biological	• Genetic vulnerability • Family medical history • Birth defects • Developmental delays • Age • Race • Sex • Gender • Sexual Orientation	• Onset of acute illness/infection • Onset of severe medical disorder • Major surgery or medical procedures • Physical trauma • Substance use/misuse	• Substance use/misuse • Chronic physical illness • Immunosuppression
Socio-environmental	• SES/Poverty • Geographic region • Childhood experiences • Education level • Chronic job stress	• Life events (having a baby, car accident, getting married, getting laid off from a job, academic struggles, divorce, etc.) • Social/esteem support • Interpersonal conflict • Natural disasters	• Social/esteem support • Work/life schedule rigidity • Social stigma • Financial obligations • SES/Poverty • Unemployment • Social factors (secondary gain)
Psychological	• Personality traits • Temperament • Psychopathology • Distress tolerance • Family mental health history	• Poor coping style/problem solving • Negative/maladaptive thoughts • Psychopathology	• Coping style • Social support • Compensatory behaviors • Negative/maladaptive thoughts • Avoidance behaviors

Nature \ Effect		Predisposing	Precipitating	Aggravating	Maintaining
NATURE	***Bio***	E.g. Genetic predisposition e.g. panic disorder	E.g. First dose of cannabis abuse	E.g. Further abuse	E.g. Continuation of cannabis abuse
	Psycho	E.g. Abnormal personally traits with poor stress adaptation	E.g. Sudden or severe psychological stress	E.g. Further psychological stresses	E.g. Continuation of such stresses
	Social	E.g. Parental separation	E.g. Marriage	E.g. Marital conflict	E.g. continuation of marital problems

Supernatural Concepts



Evil Eye | **Witchcraft** | **Possession**

Other Concepts

Islamic Concepts	Cultural Concepts & Practice
1. The effects of evil eyes, witchcraft and possessions on health in general is proven 2. They can be one of the major or minor etiological factors for any type of disease 3. The pathophysiology, symptoms and signs are not proven or certain (all that is known is that they are mentioned in religious scriptures) 4. The faith healing (Rogiah) is: • One important preventive & treatment modality for all types of diseases. • Not a diagnostic tool.	1. Some people deny the effects of evil eyes, witchcraft and possessions on health 2. Others exaggerate their effects and over blame them 3. The pathophysiology, symptoms and signs are related to specific kind of illnesses 4. Some faith healers are ignorant: • Use faith healing as a diagnostic tool. Verbally and physically aggressive with patients • Advice patients against medical management

Classification & Diagnosis in Psychiatry

- Depends mainly on **signs & symptoms** (psychopathology).
- Rarely we use external validation.
- Lab tests, Brain imaging, etc.
- Clinical skills are essential.

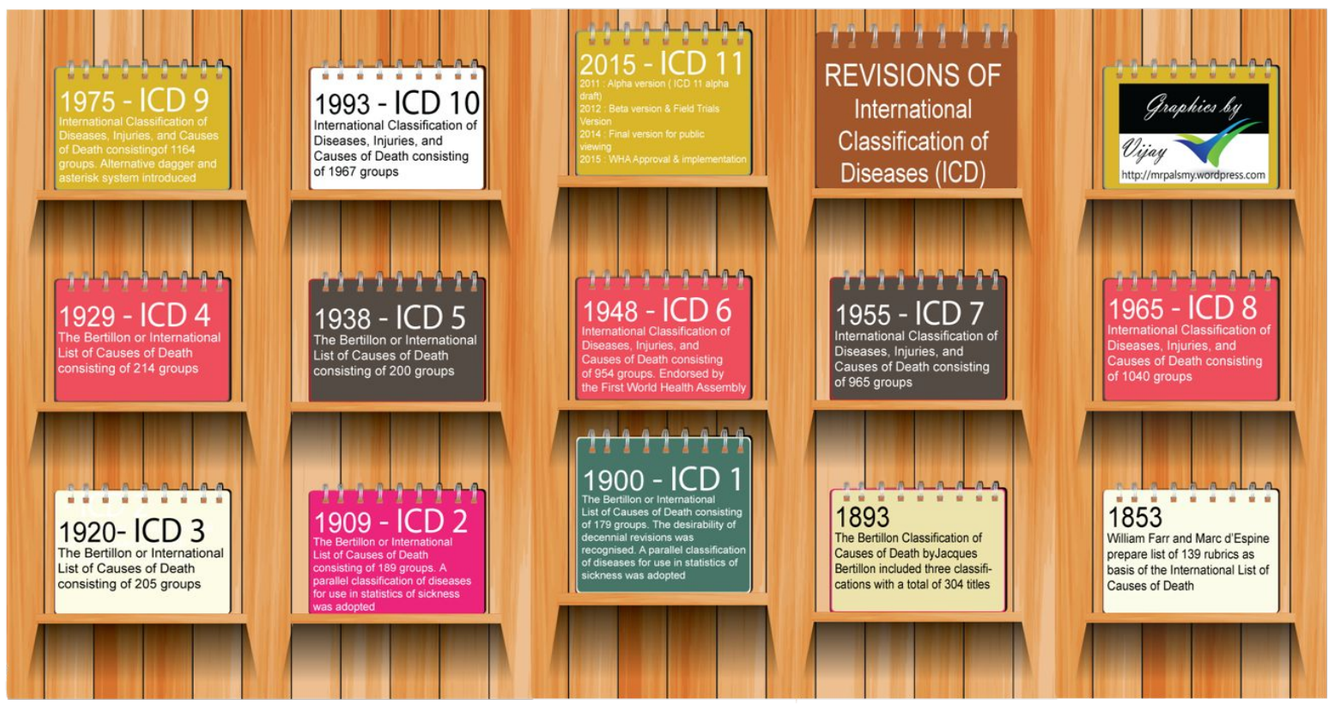
◄ Why Classify Disorders?

- **Introduces order** and structure to our thinking and reduces the complexity of clinical phenomena.
- **To distinguish** one diagnosis/illness from another.
- **Facilitate communication** among clinicians about diagnosis, treatment, & prognosis
- **Help to predict** outcome (e.g. schizophrenia has chronic course).
- Often used to choose an **appropriate treatment**.
- Ensure that **psychiatric research** can be conducted with comparable groups of patients (through the standardization of the diagnostic approach).

◄ Definition of Mental Disorder

- A syndrome[1] characterized by clinically significant disturbance in an individual's **cognition, emotion regulation, or behavior** that reflects a **dysfunction** in the **psychological, biological, or developmental processes** underlying mental functioning.
- Mental disorders are usually associated with significant **subjective distress or impairment** in social, occupational, or other important activities.
  - Mental disorders require a dysfunction that is either long in duration or causative of functional impairment
- Drawbacks of the definition: The immeasurability of the aforementioned dysfunctions, lack of clear distinction between disorders and normal variations of stress.[2]

◄ Classifications of Diseases: WHO's International Classification of Diseases (ICD)



FOOTNOTES

1. A syndrome: a cluster of signs and symptoms that tend to follow a typical prognosis within a patient, syndromes are usually defined by signs and symptoms. A disease is defined by its etiological factors. Psychiatry principally deals with syndromes, as the etiologies for most disorders remain unknown with few neurocognitive exceptions (e.g. Alzheimer's)
2. A way to establish dysfunction is by gauging the probability of adverse outcomes linked to that dysfunction or through the manifested distress or impairment in the quality of life brought by the psychiatric issue. The demarcation between mental illnesses and normal variations of emotional responses will be discussed in more depth in upcoming lectures

◄ Diagnostic and Statistical Manual of Mental Disorders (DSM)

- Published by APA: a common language and standard criteria for the classification of mental disorders.
- The manual contains symptoms that must be present to make a given diagnosis. These diagnoses are then placed into a classification system.
- The manual evolved from systems for collecting census and psychiatric hospital statistics.
- Developed by the US Army, 1952. Five revisions since it was first published.
- DSM-5 is the standard diagnostic manual in the middle east
- Advantages of introducing DSM: (1) increased reliability (different psychiatrists agree on what they see, same diagnosis reached with repeated encounters), (2) facilitates history-taking and constructing a list of differentials.
- Disadvantages: (1) may decrease validity[1], (2) treating the patients as checklists rather than persons
- The last major revision was the fourth edition ("DSM-IV"), published in 1994, although a "text revision" was produced in 2000.
    - DSM-5 was published in May 2013.

◄ Similarities between DSM-5 and ICD-10

- Both are **diagnostic** and **categorizing manuals** require two or more symptoms to make a diagnosis.
- Both are NOT self-diagnosis manuals; Intended for use by qualified health professionals, more specifically psychiatrists.
- Both are officially recognized manuals used to categorize and diagnose mental disorders.
- Attempts are on, to further harmonize between the two systems of disease classification.

DSM-5	ICD-10
1. DSM used mainly in the USA and Canada 2. DSM is purely for mental disorders 3. DSM issued by single national professional body-American Psychiatric Association 4. DSM primary constituency is U.S. psychiatrists 5. DSM approved by assembly of **APA** members 6. DSM is copyrighted and generates income for APA (purchasable) 7. DSM criteria very specific and detailed 8. DSM always been multi-axial except in DSM-5[2] 9. DSM used by licensed mental health professionals with advanced degrees 10. DSM-5 DOES NOT include treatment guidelines	1. ICD Internationally 2. ICD is larger manual, encompasses all types of diseases/disorders; Only chapter V is relevant for mental disorders. ICD brought out of international collaboration; 3. ICD produced by a global health agency with a constitutional public health mission 4. ICD primary focus on classification is to help countries to reduce burden of mental disorders. Its development is global, multidisciplinary and multilingual 5. ICD approved by World Health Assembly comprising of 193 member countries 6. ICD is low cost and available **free on internet** 7. ICD more of prototype descriptions with less detailed criteria and minimum background information to guide diagnosis 8. ICD always been non-axial 9. ICD accessible to wide rage of healthcare professionals with wide educational backgrounds
• Conceptual differences e.g., Bulimia nervosa is characterized by 'morbid dread of fatness' while DSM requires 'self evaluation' • PTSD is much broader in ICD-10 than in DSM-5 • Differences can cause problems in research comparisons	

FOOTNOTES

1. Validity refers to the capacity to predict outcomes and etiology. Even though DSM may allow different psychiatrists to agree on the same observation (reliability), it bears little reference to the underlying biological or psychoanalytical causes of mental disorders (less valid)
2. The multiaxial model previously formed the basis of psychiatric assessment. There are 5 axes which can be viewed here. Axis I: the presenting problem (e.g., anxiety, depression), Axis II: The personality disorder associated with the presenting problem (e.g., narcissistic, dependent), Axis III discusses underlying contributive pathological conditions, and IV discusses social and environmental factors. Axis V: severity (through something called GAF scale). This was exceptionally useful since a depressed narcissistic (arrogance, sense of superiority) is different from a depressed dependent (sensation of helplessness and clinging to others)

◄ Other Classifications: Neurosis vs. Psychosis

Neurosis[1]	Psychosis[1]
1. Intact insight & reality testing (intact insight and reality testing: aware that they have a problem and differentiate reality from delusions or hallucinations) - They are in active recognition of their symptoms. 2. Good judgment 3. Abnormal quantity of symptoms and there are no psychotic features **(no delusions or hallucinations)** 4. Often mild 5. Examples: anxiety disorders, obsessive convulsive disorder (OCD), obsessive convulsive personality disorder (OCPD) and post-traumatic stress disorder (PTSD) 6. Some illnesses like depression can be either a neurotic or psychotic illness depending on severity	1. Impaired insight & reality testing (And will therefore deny having a disease) 2. Impaired judgment 3. Presence of active/positive psychotic features like **delusion** and **hallucinations** & negative like poverty of thoughts & speech, lack of ambition, initiation and restricted affect 4. Often severe 5. Example. Schizophrenia, brief psychotic disorder, schizoaffective disorder, schizophreniform disorder, delusional disorder

◄ Primary Vs Secondary Psychiatric Disorders

Primary	Secondary
1. Etiology is: Multi-factorial, e.g. schizophrenia, Major depressive disorder. 2. In medicine: like essential hypertension. 3. Clues suggestive of being primary: a. Normal consciousness & vital signs. b. Presence of : Auditory hallucinations. c. Soft neurological signs (nonlocalizing neurological abnormalities) d. No related physical illness. e. Young age onset	1. Etiology: one diagnosable systemic medical disease, CNS disease or substance, e.g. Depression due to SLE or Psychosis due to amphetamine. 2. In medicine: like secondary HTN due to renal artery stenosis. 3. Clues suggestive of being secondary: a. Disturbance of consciousness or vital signs. b. Presence of: non-auditory hallucinations e.g. visual or tactile. c. Hard neurological signs (localizing neurological abnormalities) d. Physical illness. e. Old age onset

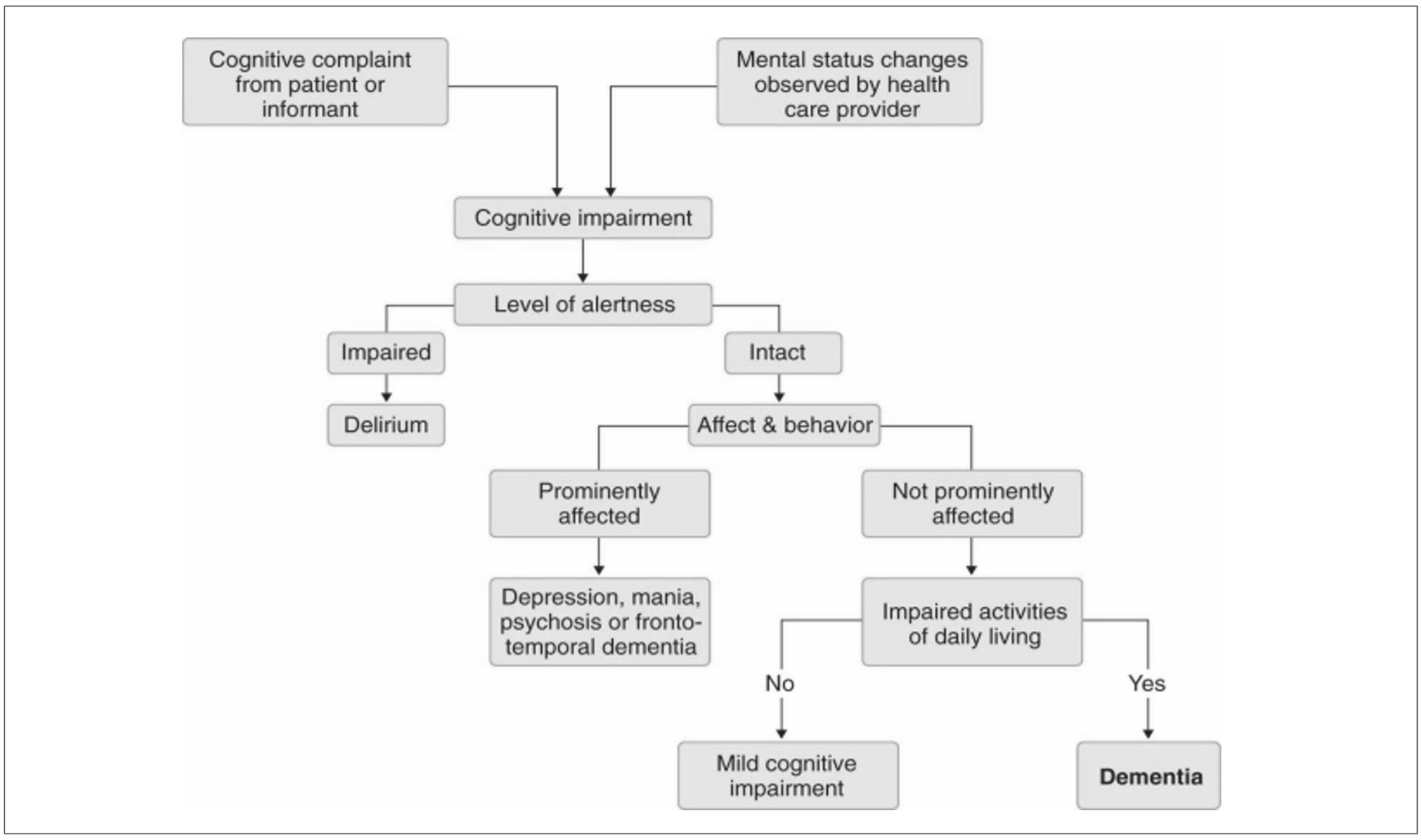
FOOTNOTES

1. Arabic equivalents (psychosis: ذهان), (neurosis: عصاب)

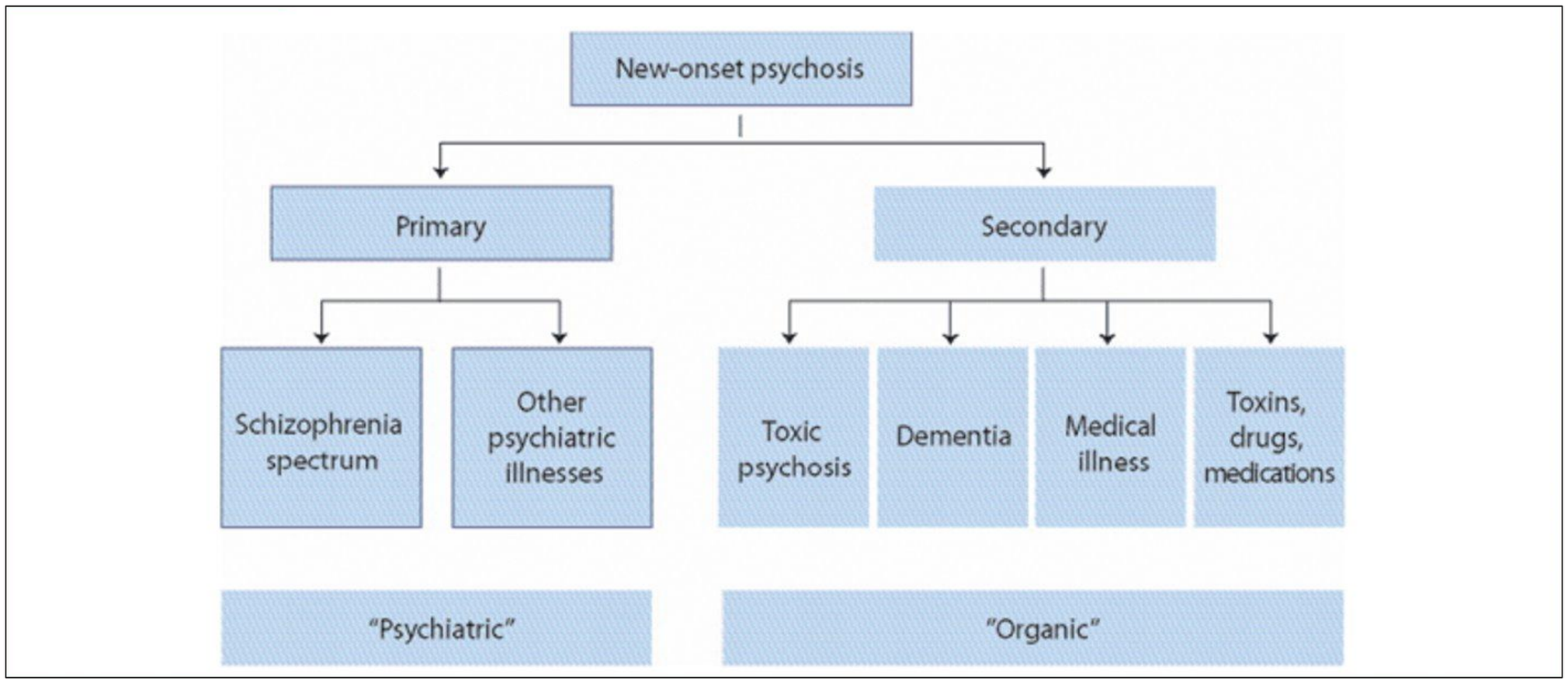
◀ Positive and Negative Psychotic Symptoms

Negative Symptoms	Positive Symptoms
1. Poverty of thoughts & speech 2. Lack of ambition, interest & initiation 3. Restricted affect 4. Self-neglect, Poor self care & hygiene	1. Perception e.g. hallucination 2. Thinking e.g. delusions (unshakeable or fixed false belief) 3. Mood e.g. extreme euphoria 4. Behavior e.g. disorganized behaviour
Positive and negative psychotic symptoms only apply to psychotic illnesses	

◀ Diagnostic Tree for Cognitive Impairment (skipped)



◀ Differential Diagnosis of New-Onset Psychosis



Quiz

1. Hallucinations and delusions are features of?
   a. Depression
   b. Psychosis
   c. Anxiety
   d. Neurosis

2. Which of the following is a positive symptom of psychosis?
   a. Euphoria
   b. Self-neglect
   c. Lack of ambition
   d. Restricted affect

3. When was the multiaxial model abandoned?
   a. DSM-I
   b. DSM-II
   c. DSM-IV
   d. DSM-5

4. An advantage of DSM-5 is:
   a. Delineates clear treatment guidelines
   b. Invariably increases the validity of clinical diagnosis
   c. Increases the reliability of clinical diagnosis
   d. A and C

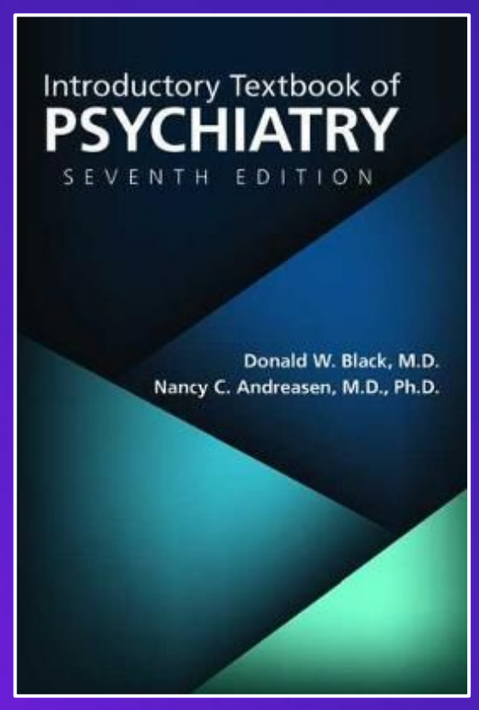
5. Psychiatry mainly deals with:
   a. Syndromes, as disorders are often classified by their etiology
   b. Diseases, as disorders are often classified by their signs and symptoms
   c. Syndromes, as disorders are often classified by their signs and symptoms
   d. Diseases, as disorders are often classified by their etiology

Answer Key: 1) B, 2) A, 3) D, 4) C, 5) C

LECTURE DONE BY

Abdulrahman M. Bedaiwi,
Nayef Alsaber

EDITORS & CO-LEADERS
Nayef Alsaber, Abdulrahman M. Bedaiwi



Special thanks to Medicine 438's Surgery Teamwork for their help in constructing the template of our lectures.

جامعة الملك سعود
King Saud University
1957