

# ETIOLOGY IN PSYCHIATRY, CLASSIFICATION/DIAGNOS IS IN PSYCHIATRY

Dr. Ali Bahathig, FRCPC, Assistant Professor and Consultant of Psychiatry & Psychosomatic Medicine

Psychosomatic Unit, Psychiatry Department

King Saud University Medical City (KSUMC)

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### **SPECIAL TAHNKS TO:**

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> 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

 $\succ$  To describe the differences between psychosis and neurosis



### > The Complexity of etiological factors:

1. <u>Time factors:</u>

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

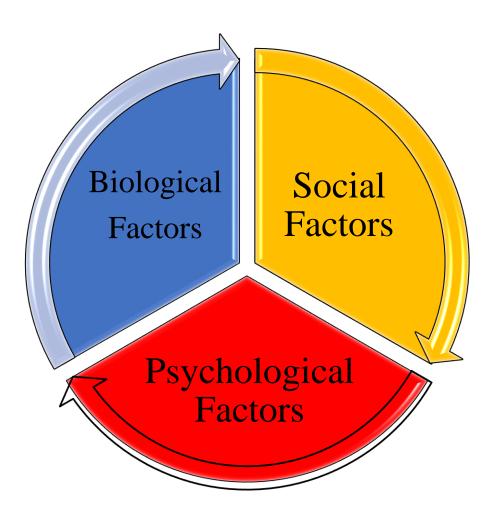
### 3. <u>Single effect:</u>

➤ 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 <u>multifactorial</u>

Etiological factors can be classified into <u>biological</u>, <u>psychological</u>, and social <u>factors</u>: Bio-Psycho-Social Approach (Engel 1977)



### **Biological Factors**

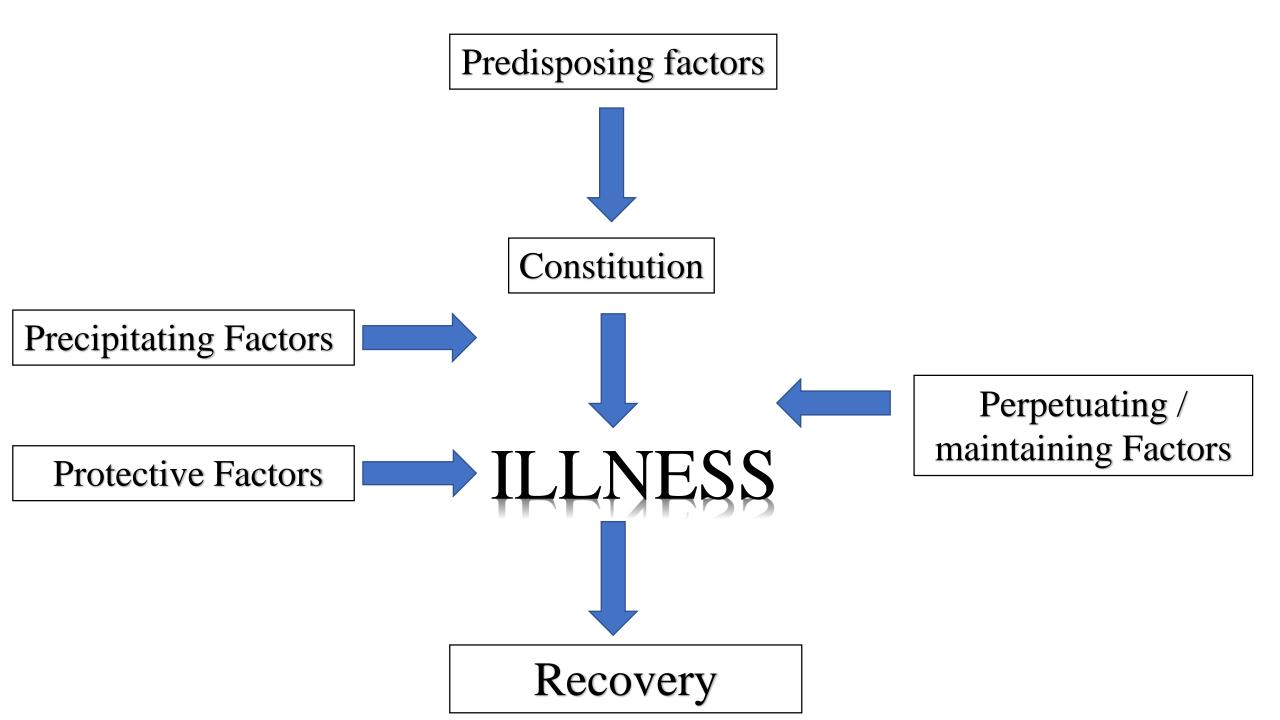
### **Psychological factors**

### **Social Factors**

- **Genetic**: e.g. in schizophrenia
- \* Neuropathological: e.g. dementia
- Endocrinological: e.g.
   hyper/hypothyroidism
- Biochemical: the monoamine neurotransmitters
- Pharmacological: side effects of medications e.g. steroids
- **♦ Metabolic**: DM
- ✤ Inflammatory/ autoimmune

- Thinking distortions
- \* Emotional dysregulation
- ✤ Behavioral problems
- **\*** Unconscious conflicts
- **\*** 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



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	Recent loss, stress,	School stressors, loss of
	sleep, substance	reexperience	significant relationship,
	use/misuse	abandonment/fears	loss of home
Perpetuating	Poor response to	Personality traits, coping	Role of stigma to access
	medication, chronic	mechanism, beliefs of	treatment, poor finance,
	illness/pain	self, others and the world	ongoing transition
Protective	Adequate diet, sleep,	Insightful and cognitive	Community, family and
	good genes, physical	behaviour strategies,	faith support, financial or
	exercise, resilience,	coping skills,	disability support, GP
	intelligence	psychologically minded	support

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

Effect		Effect			
Na	ture	Predisposing	Precipitating	Aggravating	Maintaining
N A	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
T U R	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
E	Social	E.g. Parental separation	E.g. Marriage	E.g. Marital conflict	E.g. continuation of marital problems

# SUPERNATURAL

≻ Evil eye

➢ Witchcraft

Possession



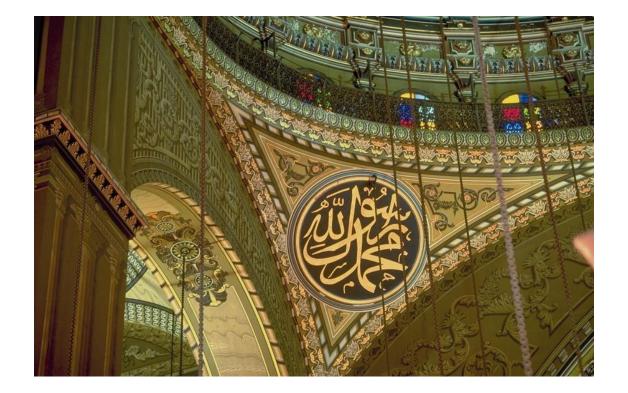
### **Islamic concepts**

### **Cultural concepts and practice**

- The effects of evil eyes, witchcraft and possessions on health in general is proven.
- They can be one of the major or minor etiological factors for any type of disease.
- The pathophysiology, symptoms and signs are not proven or certain.
- The faith healing (Rogiah) is:
- One important preventive & treatment modality for all types of diseases.
- > Not a diagnostic tool

- Some people deny the effects of evil eyes, witchcraft and possessions on health.
- Others exaggerate their effects and over blame them.
- The pathophysiology, symptoms and signs are related to specific kind of illnesses.
- **\*** Some faith healer are ignorant:
- > Use faith healing as a diagnostic tool.
- Verbally and physically aggressive with patients.
- Advice patients against medical management.

## Islamic vs sociocultural concept



النظرة الاجتماعية لا تمثل الشرع

(لا تطابق تماما و لا تخالف تماما )



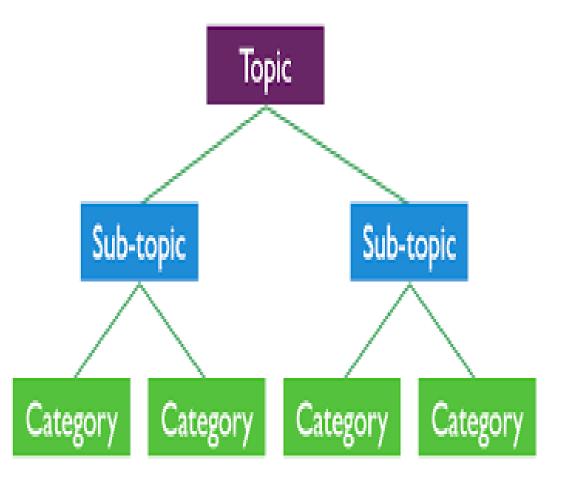
# CLASSIFICATION/DIAGNOSIS IN PSYCHIATRY

# Classification & Diagnosis In Psychiatry

- Depends mainly on signs & symptoms (psychopathology)
- Rarely we use external validation

≻lab tests ,brain imaging, ...etc

Clinical skills are essential



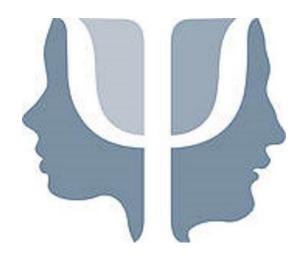
# Why to classify ?

- Introduces order and structure to our thinking and reduces the complexity of clinical phenomena
- > <u>To distinguish</u> 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 <u>appropriate treatment</u>
- Ensure that <u>psychiatric research</u> can be conducted with comparable groups of patients

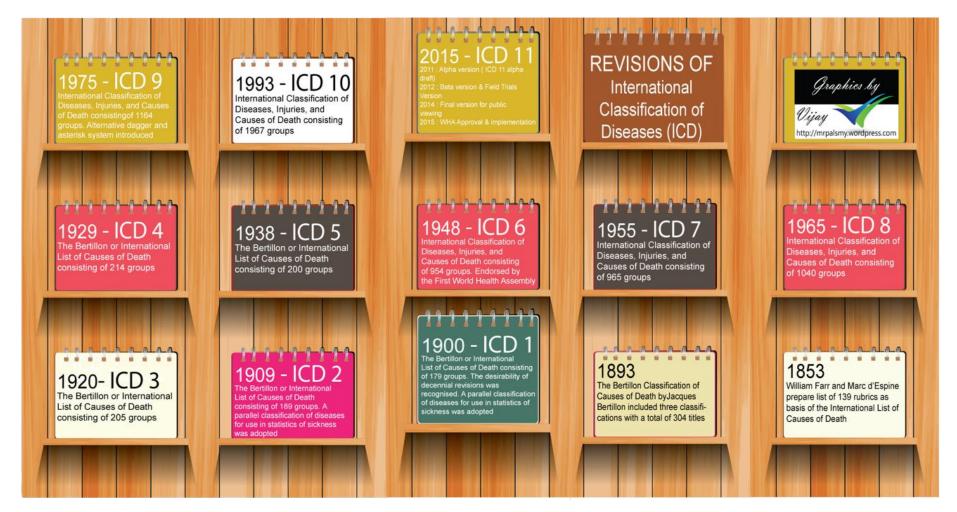
# Definition of Mental Disorder

A syndrome characterized by clinically significant disturbance in an individual's *cognition*, *emotion regulation*, or *behavior* that <u>reflects a</u> <u>dysfunction</u> in the psychological, biological, or developmental processes underlying mental functioning

Mental disorders are associated with significant subjective distress or impairment in social, occupational, or other important activities

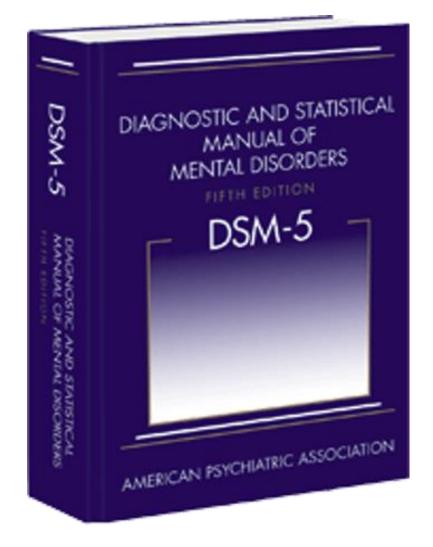


### Classifications of diseases WHO | International Classification of Diseases (ICD)



# 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 evolved from systems for collecting census and psychiatric hospital statistics
- ➤ Developed by the US Army, 1952
- ➢ Five revisions since it was first published
- 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



### TABLE 1

#### **CHAPTERS IN DSM-5**

- Neurodevelopmental Disorders
- Schizophrenia Spectrum & Other Psychotic Disorders
- Bipolar & Related Disorders
- Depressive Disorders
- Anxiety Disorders
- Obsessive-Compulsive & Related Disorders
- Trauma- & Stressor-Related Disorders
- Dissociative Disorders
- Somatic Symptom Disorders
- Feeding & Eating Disorders
- Elimination Disorders
- Sleep-Wake Disorders
- Sexual Dysfunctions
- Gender Dysphoria
- Disruptive, Impulse Control & Conduct Disorders
- Substance Use & Addictive Disorders
- Neurocognitive Disorders
- Personality Disorders
- Paraphilic Disorders
- Other Disorders

The number of total disorders in DSM-5 has not increased significantly, but some disorders have now had their importance recognized by being allocated separate chapter headings (e.g. Obsessive Compulsive Disorder). The chapter on Neurodevelopmental Disorders is a new heading containing autism spectrum disorders, intellectual development disorder, and attention/hyperactivity disorder (ADHD). The chapter on Substance Use & Addictive Behaviours will now includes gambling disorder. The importance of both Bipolar Disorder and Depressive Disorders is recognized by them being allocated to separate chapters.

# Similarities between DSM-5 and ICD-10

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



### Differences between DSM-5 and ICD-10



### DSM-5

- **\*** DSM used mainly in the USA
- **\*** DSM is purely for mental disorders

- DSM issued by single national professional body-American Psychiatric Association
- **\*** DSM primary constituency is U.S. Psychiatrists

- **\*** DSM approved by assembly of APA members
- **\*** DSM is copyrighted and generates income for APA

### **ICD-10**

- **\*** ICD Internationally
- ICD is larger manual, encompasses all types of diseases/disorders; Only chapter V is relevant for mental disorders
- ICD brought out of international collaboration; ICD produced by a global health agency with a constitutional public health mission
- ICD primary focus on classification is to help countries to reduce burden of mental disorders. Its development is global, multidisciplinary and multilingual
- ICD approved by World Health Assembly comprising of 193 member countries
- \* ICD is low cost and available free on internet

DSM-5	ICD-10
* DSM criteria very specific and detailed	ICD more of prototype descriptions with less detailed criteria and minimum background information to guide diagnosis
SM always been multi-axial except now	ICD always been non-axial
Solution States Stat	ICD accessible to wide rage of health care professionals with wide educational backgrounds

- Conceptual differences; Ex: Bulimia nervosa is characterized by 'morbid dread of fatness' while DSM requires 'self evaluation'
- > PTSD is much broader in ICD-10 than DSM-5
- > Differences can cause problems in research comparisons

## Other Classification:



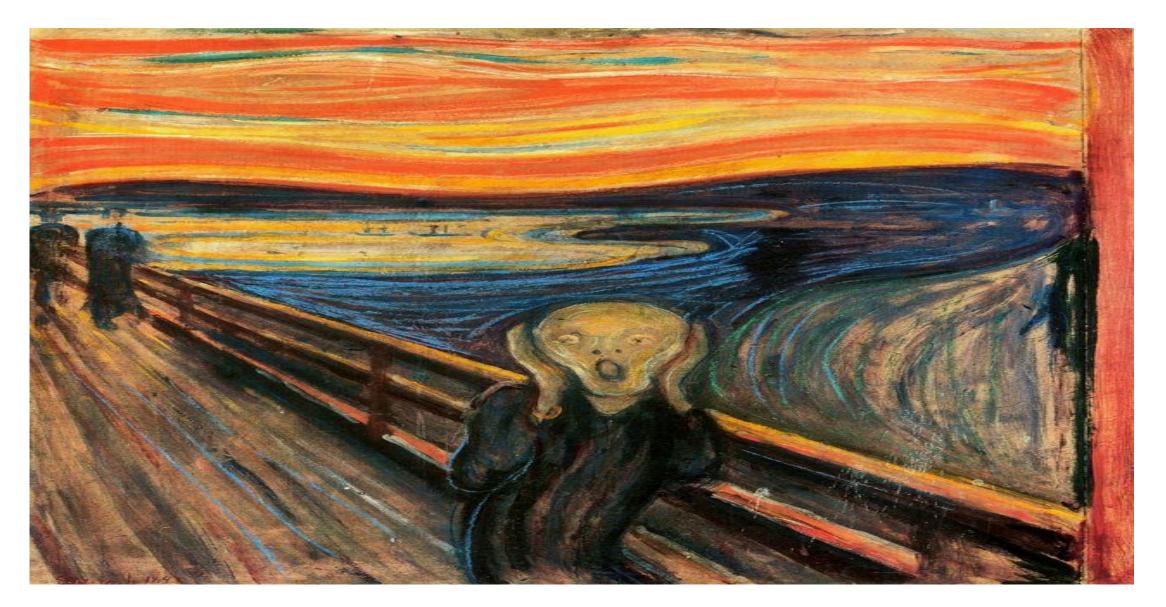
# Neurosis Vs. Psychosis Classification

NEUROSIS	PSYCHOSIS
Intact insight & reality testing	Impaired insight & reality testing
✤ Good judgment	✤ Impaired judgment
Abnormal quantity of symptoms and there are No psychotic features	Presence of active/positive psychotic features like delusion and hallucinations & negative like poverty of thoughts & speech, lack of ambition, initiation and restricted affect
E.g. anxiety disorders	✤ E.g. schizophrenia



Neurosis vs. Psychosis

# Primary Vs Secondary Psychiatric Disorders



# Primary Vs Secondary Psychiatric Disorders

Primary	Secondary
<ul> <li>Etiology is: Multi-factorial e.g. schizophrenia Major depressive disorder</li> </ul>	Etiology : one diagnosable systemic medical disease, CNS disease or substance e.g. Depression due to SLE or Psychosis due to amphetamine
In medicine: like Essential hypertension	In medicine: like secondary HTN due to renal artery stenosis
<ul> <li>Clues suggestive of being primary :</li> <li>Normal consciousness &amp; vital signs</li> <li>Presence of : Auditory hallucinations</li> <li>Soft neurological signs</li> <li>No related physical illness</li> <li>Young age onset</li> </ul>	<ul> <li>Clues suggestive of being secondary:</li> <li>Disturbance of consciousness or vital signs</li> <li>Presence of : non-auditory hallucinations <ul> <li>e.g. visual</li> <li>Hard neurological signs</li> <li>Physical illness</li> <li>old age onset</li> </ul> </li> </ul>

# Positive Vs Negative Psychotic Symptoms/Features

### **Positive Symptoms**

- ✤ Perception e.g. hallucination
- Thinking e.g. delusions
- ✤ Mood e.g. extreme euphoria
- Behavior e.g. disorganized behaviour

### **Negative Symptoms**

- Poverty of thoughts & speech
- ✤ Lack of ambition , interest & initiation
- Restricted affect
- Self-neglect, Poor self care & hygiene



# Diagnostic tree for Cognitive Impairment

