

# CLASSIFICATION SYSTEMS

# INTRODUCTION

- Natural human predilection to categorize and classify
- Simplify and organize wide range of observable phenomena and experiences
- Facilitates understanding

## CLASSIFICATION

- A process by which complex phenomena are reduced by re-arranging into categories based on shared characteristics (Jacob, 2010)
- Classification in science involves forming categories or taxa for ordering natural objects or entities and assigning names to these categories

## CLASSIFICATION IN PSYCHIATRY

- Different as compared to other biological classifications
- Objects classified are not “natural”, but man-made explanatory concepts
- Not mutually exclusive categories
- Concept of “disorder”
  - First introduced in DSM I in 1952
  - No correspondence with concept of disease or syndrome

## HISTORICAL DEVELOPMENTS - DSM

- Late 1800s
  - Kraepelin and Alzheimer worked to understand neurological basis of disorders
  - Advanced that mental disorders have biological basis
- 1844
  - Psychiatry first recognized as a medical specialty in the United States, by the Association of Medical Superintendents of American Institutions for the Insane (APA in 1921)
  - In-house diagnostic systems; none matched with other
- 1920
  - Census by the U.S. Census Bureau to understand prevalence of mental disorders
  - Produced Statistical Manual for the Use of Institutions for the Insane (SMUII)- 21 disorders (19 psychotic)

# HISTORICAL DEVELOPMENT - DSM

- Mid 20<sup>th</sup> century
  - Robin and Guze work on developing reliable and valid diagnostic criteria
  - Adopted well-established five-phase diagnostic validation model for operationalization of criteria for medical diagnosis (developed by Sydenham in 17<sup>th</sup> century)
    - Clinical characteristics of the syndrome and of the patients who develop it (including core symptoms, demographic characteristics, and precipitating factors)
    - Exclusionary criteria differentiating the syndrome from other known disorders
    - Family studies
    - Laboratory data (radiological, chemical, pathologic, and psychological evidence)
    - Follow-up studies (for diagnostic stability, course, and treatment response)
- Three major contributions of the Robins/Guze methods:
  - Systematic application of operationalized criteria to psychiatric diagnosis
  - Basis in empirical data rather than clinical opinion to optimize diagnostic criteria
  - Emphasis on course and outcome as a critical defining feature of psychiatric illness

## HISTORICAL DEVELOPMENT - DSM

- 1950s
  - Five separate “official” diagnostic classification systems were being used in the United States in different settings, including the insane asylum system, the Army, the Navy, the Department of Veterans Affairs (VA), and the American Prison Association
- DSM I (1952)
  - Based on Veterans Affairs system
  - Based on etiology - Influenced by psychoanalysis and related terminology
  - Reliability and validity of diagnosis not established
  - Two main sections – Organic and Functional
  - Nomenclature of mental disorders as “reaction” to stressors

## HISTORICAL DEVELOPMENT - DSM

- DSM II (1968)
  - Expanded sections to ten
  - Included child and adolescent section
  - Kept psychoanalytic orientation, but removed “reaction”
- 1970s – Robert Spitzer selected to head revision of DSM III
- DSM III (1980)
  - Atheoretical orientation
  - Established reliability and validity
  - Hierarchical, multi-axial system for diagnosis utilizing exclusion criteria
  - Addition of PTSD and BPD



## HISTORICAL DEVELOPMENT - DSM

- Axis I: Clinical disorders
- Axis II: Personality Disorders and Mental Retardation
- Axis III: General medical conditions
- Axis IV: Psychosocial and environmental problems
- Axis V: Global Assessment of Functioning within last 6 months

## HISTORICAL DEVELOPMENT - DSM

- DSM – III –R (1987)
  - Removed hierarchical system – allowing for diagnosis of comorbidity
  - Refinement in diagnostic criteria
- 1988 – task force setup for DSM IV headed by Allen Frances
- DSM IV (1994) and DSM-IV-TR (2000)
  - Addition of “clinically significant distress or impairment” across the diagnostic criteria
  - Further refinement of criteria
  - Addition of further research findings in text
  - Introduction of Acute stress disorder, bipolar II disorder, and Asperger’s disorder

## DSM IV FORMAT

- “Diagnostic features” of disorders described
- Subtypes and/or specifiers
- Associated features and disorders
  - Associated descriptive features and mental disorders
  - Associated laboratory findings
  - General medical conditions
- Several other sections
  - Specific culture, age and gender features
  - Prevalence
  - Course
  - Familial patterns
  - Differential diagnosis

# DSM 5

- 1999 – David Kupfer to chair revision of DSM 5
- DSM 5 (2015)
  - Removal of multi-axial approach
    - Lack of clear boundaries between psychiatric and medical disorders
    - Inconsistent use of axis IV (psychosocial and environmental problems)
    - Poor psychometric and clinical validity of axis 5 (global assessment of functioning)
  - Use of Arabic number “5”
  - Dimensional approach - use of specifiers, subtypes, severity ratings, and cross-cutting symptom assessments
    - E.g., “with anxious distress” as specifier for depression – indicating difficulty concentrating because of worry

# DSM 5

- **Cross-cutting Measures**

- assess the presence and severity of 12-13 psychiatric symptom domains that cut across diagnostic boundaries
- Includes depression, anger, mania, anxiety, somatic symptoms, sleep disturbance, psychosis, obsessive thoughts and behaviors, suicidal thoughts and behaviors, substance use, personality functioning, dissociation, and cognition/memory problems
- Not intended to be diagnostic or to serve as screening measures for any disorder; but to provide clinicians with quantitative ratings.
- **Two levels**
  - Level I consists of a 23-item (adults) or a 25-item (children/adolescents) measure of the presence and severity of symptoms over the past two weeks
  - The items, with exception of suicide ideation, suicide attempts, and substance use in children/adolescents, are rated on a 5-point scale (i.e., 0=none/never; 1=slight/rare; 2=mild/several days; 3=moderate/more than half the days; and 4=severe/almost daily), with higher scores indicating greater frequency of occurrence or greater degree of severity

## DSM 5

- Items scored as 2 or greater (i.e., mild/several days) or with a “yes” trigger the completion of a more detailed assessment of that symptom domain using the associated self- or informant-reported DSM-5 Level 2 CC Symptom measure
- Level 2 CC measures inquire about the presence and severity of symptoms within pure psychiatric domains during the past seven days
- For example, if depression is indicated from the Level I assessment, the clinician would complete the Level 2 “Emotional Distress–Depression” assessment, which is an eight-item measure that uses a 5-point scale (1 = never, 5 = always) to evaluate such depressive symptoms as worthlessness, helplessness, and hopelessness.

# DSM 5

- Addition of new disorders
  - Hoarding disorder
  - Disruptive Mood Dysregulation Disorder
  - Binge eating disorder
  - Premenstrual Dysphoric Disorder
  - Restless leg syndrome
  - REM sleep behaviour disorder
- Organized in developmental and lifespan perspective
  - Processes happening early in life (neurodevelopmental, schizophrenia spectrum and other psychotic disorders)
  - Processes developing in adolescence and early adulthood (depression, anxiety)
  - Diagnosis relevant to later life (neurocognitive disorders)

# DSM 5

- Cultural issues
  - Culture-bound syndromes replaced with
    - Cultural syndrome
    - Cultural idiom of distress
    - Cultural explanations
  - Section III: “cultural formulation” - CFI



# DSM 5

Neurodevelopmental Disorders	<ol style="list-style-type: none"><li>1. Mental retardation → Intellectual Disability</li><li>2. Communication Disorders</li><li>3. Autism Spectrum Disorders</li><li>4. ADHD (addition of threshold for adults, Sx before 7 years replaced with “several symptoms” before age 12)</li><li>5. Specific Learning Disability</li><li>6. Motor Disorders</li></ol>
Schizophrenia Spectrum and Other Psychotic Disorders	<ol style="list-style-type: none"><li>1. Schizophrenia (removal of special attribution to Schneider’s symptoms; should have at least one out of three-delusions, hallucinations &amp; disorganized speech. Removal of subtypes and addition of dimensional approach)</li><li>2. Schizoaffective Disorders</li><li>3. Delusional Disorder (removed requirement that delusions have to be non-bizarre. Specific criteria to discriminate with OCD and BDD without insight)</li><li>4. Catatonia (all contexts)</li></ol>

# DSM 5

Bipolar and related Disorders	<ol style="list-style-type: none"><li>1. Bipolar Disorders (Criterion A incl emphasis on change in activity, energy and mood; specifier “with mixed features” and “anxious distress” added)</li><li>2. Depressive Disorders (Disruptive mood dysregulation disorder and PMDD added; Dysthymia changed to Persistent Depressive Disorder; In MDD, removal of “bereavement” as exclusion; specifiers common to BPD added)</li></ol>
Anxiety Disorders	<ol style="list-style-type: none"><li>1. Removal of OCD and PTSD</li><li>2. Agoraphobia, Specific Phobia, Social Anxiety Disorder (Elimination of requirement that individual recognize anxiety as excessive; inclusion of 6 month duration across age-group)</li><li>3. Panic Attack (simplified terminology; can be used as specifier anywhere)</li><li>4. Panic Disorder with Agoraphobia</li><li>5. Separation Anxiety Disorder (added; elimination of age criteria)</li><li>6. Selective Mutism (added)</li></ol>

# DSM 5

Obsessive-Compulsive and Related Disorders	<ol style="list-style-type: none"><li>1. New chapter</li><li>2. Other additions – hoarding disorder, skin picking, alcohol/substance-induced OC, OC related to general medical condition, Tricotellomania, BDD)</li></ol>
Trauma and Stress-related Disorders	<ol style="list-style-type: none"><li>1. Acute Stress Disorder (stressor criteria more explicit; removal of “subjective distress”)</li><li>2. Adjustment Disorder</li><li>3. PTSD (significant changes in criteria as well as more developmentally sensitive)</li><li>4. Reactive Attachment Disorders (broken into two sub-types, ie, “RAD” and “Disinhibited Social Engagement Disorders”)</li></ol>
Dissociative Disorders	<ol style="list-style-type: none"><li>1. Combination of depersonalization/derealization</li><li>2. Changes in DID to include possession-like syndromes</li></ol>

Substance related and Addictive Disorders	<ol style="list-style-type: none"> <li>1. Addition of “gambling disorders”</li> <li>2. No separate diagnosis of abuse and dependence</li> <li>3. Removal of legal ramification and addition of craving</li> <li>4. Severity based on number of criteria</li> <li>5. Addition of caffeine and cannabis withdrawal</li> </ol>
Somatic Symptoms and Related Disorders	<ol style="list-style-type: none"> <li>1. Somatic Symptom Disorder (merger of somatization disorder and undifferentiated somatoform disorder)</li> <li>2. Medically Unexplained Symptoms</li> <li>3. Hypochondriasis and Illness Anxiety Disorder</li> <li>4. Pain Disorder</li> <li>5. Psychological Factors Affecting Other Medical Conditions and Factitious Disorder</li> <li>6. Conversion Disorder (Functional Neurological Symptom Disorder)</li> </ol>
Feeding and Eating Disorder	<ol style="list-style-type: none"> <li>1. Avoidant/Restrictive Food Intake Disorder (Feeding Disorder of Infancy or Early Childhood)</li> <li>2. Anorexia Nervosa</li> <li>3. Bulimia Disorder</li> <li>4. Binge-eating Disorder (new addition)</li> <li>5. Elimination Disorder</li> </ol>

# DSM 5

Sleep Wake Disorders	<ol style="list-style-type: none"><li>1. Breathing-Related Sleep Disorders (obstructive sleep apnea hypopnea, central sleep apnea, and sleep-related hypoventilation)</li><li>2. Circadian Rhythm Sleep-Wake Disorders (includes advanced sleep phase syndrome, irregular sleep-wake type, and non-24-hour sleep-wake type)</li><li>3. Rapid Eye Movement Sleep Behavior Disorder and Restless Legs Syndrome (from NOS category)</li></ol>
Sexual Dysfunctions (minimum duration of approximately 6 months and more precise severity criteria)	<ol style="list-style-type: none"><li>1. Genito-Pelvic Pain/Penetration Disorder (new addition; merging of the DSM-IV categories of vaginismus and dyspareunia)</li><li>2. sexual desire and arousal disorders have been combined into one disorder: female sexual interest/arousal disorder</li></ol>
Gender Dysphoria	<ol style="list-style-type: none"><li>1. phenomenon of “gender incongruence” emphasized</li></ol>



Disruptive, Impulse-Control, and Conduct Disorders	<ol style="list-style-type: none"><li>1. New addition</li><li>2. Brings together disorders that were previously included in the chapter “Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence” and “Impulse-Control Disorders Not Otherwise Specified”</li><li>3. Includes ODD, CD, IED,</li></ol>
Sexual Dysfunctions (minimum duration of approximately 6 months and more precise severity criteria)	<ol style="list-style-type: none"><li>1. Genito-Pelvic Pain/Penetration Disorder (new addition; merging of the DSM-IV categories of vaginismus and dyspareunia)</li><li>2. sexual desire and arousal disorders have been combined into one disorder: female sexual interest/arousal disorder</li></ol>
Neurocognitive Disorders	<ol style="list-style-type: none"><li>1. Delirium</li><li>2. Major and Mild Neurocognitive Disorder (major = amnesia/dementia; mild = MCI)</li><li>3. Personality Disorder</li></ol>



Paraphillic Disorders	<ol style="list-style-type: none"><li>1. addition of the course specifiers “in a controlled environment” and “in remission” to the diagnostic criteria</li></ol>
Sexual Dysfunctions (minimum duration of approximately 6 months and more precise severity criteria)	<ol style="list-style-type: none"><li>1. Genito-Pelvic Pain/Penetration Disorder (new addition; merging of the DSM-IV categories of vaginismus and dyspareunia)</li><li>2. sexual desire and arousal disorders have been combined into one disorder: female sexual interest/arousal disorder</li></ol>
Neurocognitive Disorders	<ol style="list-style-type: none"><li>1. Delirium</li><li>2. Major and Mild Neurocognitive Disorder (major = amnesia/dementia; mild = MCI); incl etiology subtypes</li><li>3. Personality Disorder</li></ol>

## ICD

- First edition in 1800s – International List of Causes of Death
- Category of mental disorders introduced for the first time in ICD 6 (WHO, 1948)
- ICD -7 (1955) – no changes to category of mental disorders
- ICD 8 (1960s) – no major change
- ICD 9 (1977)
  - Glossary with more detailed description of disorders



## ICD 10

- Fifth chapter – Classification of Mental and Behavioral Disorders
- various versions
  - Clinical Description and Diagnostic Guidelines (CDDG;WHO, 1992)
  - Diagnostic Criteria for Research (DCR;WHO, 1993)
  - Primary health care version
- Addition of multiaxial approach in 1996
  - Axis I: Clinical diagnosis including mental and physical disorders
  - Axis II: Disablements – assess impact of an illness or health problems on social and physical functioning
  - Axis III: Contextual factors – identify any problems in family or social context that might have bearing on health condition

## ICD 10

- Use of alpha-numeric codes (A00-Z99) and use of decimals
- Removal of traditional distinction between neurosis and psychosis; although term “neurotic” still retained for F40-48 (neurotic, stress-related and somatoform disorder”
- Term “psychotic” retained as descriptor
- F10-19: Mental and Behavioral Disorders Due to Psychoactive Substance Use
  - Third character: substance used
  - Fourth and fifth character: psychopathological syndromes (e.g., acute intoxication)
  -

## ICD 10

- F00-09: Organic, including Symptomatic, Mental Disorders
- F10-19: Mental and Behavioral Disorders Due to Psychoactive Substance Use
- F20-29: Schizophrenia, Schizotypal and Delusional Disorders
- F30-39: Mood (Affective) Disorders
- F40-49: Neurotic, Stress-related and Somatoform Disorder
- F50-59: Behavioral syndromes associated with physiological disturbance and physical factors
- F60-69: Disorders of Adult Personality and Behavior
- F70-79: Mental Retardation
- F80-89: Disorders of Psychological Development
- F90-98: Behavioral and Emotional Disorders with Onset Usually Occurring in Childhood and Adolescent

## ICD 10

- **F20-29: Schizophrenia, Schizotypal and Delusional States**
  - Expanded to include undifferentiated schizophrenia, postschizophrenic depression, and schizotypal disorders
- **F30-39: Affective Disorders**
  - Removal of terms “neurotic depression” and “endogenous depression”
- **F50-59: Behavioral Syndromes and Mental Disorders Associated with Physiological Dysfunction and Hormonal changes**
  - Includes eating disorders, nonorganic sleep disorders and sexual dysfunctions
- **F60-69: Disorders of Adult Personality and Behaviors**
  - Gambling, fire-setting and stealing
  - Removal of homosexuality as a disorder
  - Removal of disorders of gender identity from this group

## ADVANTAGES

- Allow mental health professionals and researchers to communicate with each other more effectively
- Arrive at a diagnosis which has important predictive power (course, prognosis)
- Organization of disorders into diagnostic classes
- Training purposes
- Aids in research
- Can help in psycho-education of client and families; also to normalize phenomenon
- In western world – important for insurance purposes

## DISADVANTAGES

- Categorical system
- Atheoretical
- Labeling