KING'S College LONDON

INSTITUTE OF PSYCHIATRY,
PSYCHOLOGY & NEUROSCIENCE

Module:
Mental Health in the Community

Week 1:
A history of 'madness': Deinstitutionalisation to community care

Dr Frank Holloway

Topic 3:
Diagnosis in psychiatry

Part 1 of 2

Topic list

This week, we will be looking at the following topics:

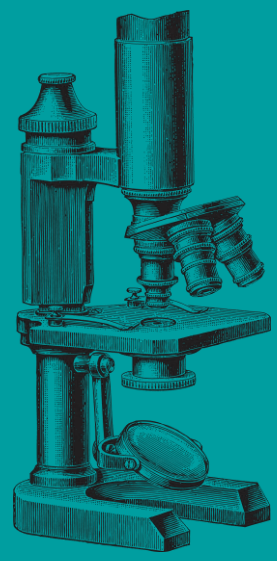
- Topic 1: Conceptualisation of mental disorder
- Topic 2: Mental illness and its critics
- ***Topic 3: Diagnosis in psychiatry***

Click **Next** to continue

Part 1

Diagnosis in psychiatry
– A misunderstood construct

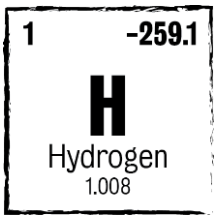
- Approaches to classification
- Classifying illness:
  - disease, injury and disorder
- A brief history of psychiatric classifications
- DSM III, DSM IV, DSM 5
- Diagnostic controversies
- Diagnosis and its critics
- Psychiatric diagnosis
  - value and limitations



Classifications

Taxonomy

Plants and other things



Periodic table

Elements

Nosology

Disease

Nosology

Nosology

Classification

Disease | Injury | Disorder

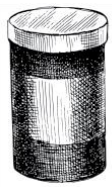
Classification by *symptoms*

- 'syndromal' approach
- almost all psychiatric disorders

Classification by *pathogenesis*

- biological mechanism underlying the disorder
  - infections
  - cancers

Classification by *causes*



- 'aetiological' approach
- scurvy caused by a lack of Vitamin C

Problems with the concept of disease (1)

How well do we understand disease?

Infection	Cancers	Diabetes	Rheumatoid arthritis	Asthma/ Peanut allergy
What makes someone susceptible?	Causal factors underlying cancers: **BRCA1** **BRCA2** genes *Associated with breast and ovarian cancer*	What factors underlie Type 1 and Type 2?	Do we really understand it?	Why has there been an increase in sufferers?

Problems with the concept of disease (2)

Subject: Alison Lapper Pregnant
Fourth Plinth at Trafalgar Square
Artist: Marc Quinn

Alison Lapper

Lives with phocomelia

- a rare condition that is either genetic or caused by exposure to the drug thalidomide during pregnancy

An artist **A parent** **Awarded an MBE**

Does she have a 'disease' or 'disorder' or is she just herself?

Congenital deafness?

Can live a very rich life!

- sign languages have a rich literature of their own

Autism?

A disorder or a different way of being?

Problems with the concept of disease (3)

Boundaries

Normal	Abnormal
110/70mmHg	140/90mmHg → *Hypertension?*
BMI: 22	BMI: 30 → *Obesity Is it an illness?*
1993 Osteoporosis = Aging	1994 Osteoporosis = Disease
DSM III Homosexuality	DSM II Homosexuality

Can what you are be a disease or disorder?

What is diagnosis for?

A basis for predictions about the future

Prognosis

A basis for therapeutics

To alleviate a problem we must have decided what the problem is

Diagnosis

An analytic tool for increasing our understanding of the causes of disease

To research a problem we must have defined what we want to look at

A means for identifying the distribution of disease within populations

Epidemiology – can inform our understanding of illnesses and help identify therapeutic avenues

A brief history of classification in psychiatry

Reynolds & Kinnier Wilson (2014)

Early approaches to nosology (1)

Descriptions of mental disorder → **Babylonian texts** → **Translated by...** → **Edward Reynolds and James Wilson** → **Brain 2014 (a journal of neurology)**

Babylon c 3500

Writing on clay tablets

Accurate descriptions of mental and neurological disorders

Descriptions only, no systematisation

Ancient Greece

Identified different mental disorders

- Mania
- Melancholia
- Hysteria

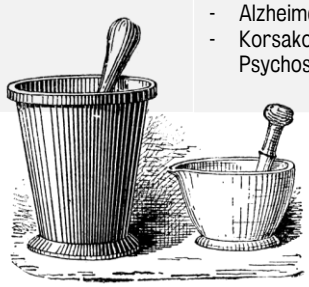
14th century common law

Distinguished between:

- Lunacy (you could get better)
- Idiocy (you would not get better)

Early approaches to nosology (2)

Multiple aetiologically-based diagnostic systems	Identification of specific organic mental disorders - General Paralysis of the Insane - Alzheimer's Disease - Korsakoff's Psychosis	Moral insanity Personality disorder Socially abnormal behaviour without insanity or mental deficiency	Distinction between 'psychosis' and 'neurosis'	The Kraepelinian dichotomy Functional psychoses - Dementia praecox (schizophrenia) - Manic-depressive psychosis (bipolar disorder)



US-UK diagnostic study

1960s diagnosis of schizophrenia

Unclear diagnostic criteria

Employed a descriptive psychopathological approach

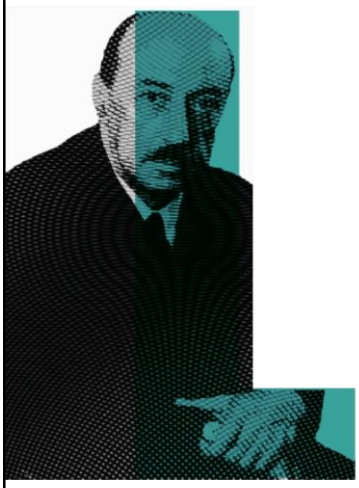
Employed clear phenomenologically-based criteria and standardised interviewing techniques

Schizophrenia was equally common

This wake-up call to US psychiatry **kick-started DSM III**

Move towards 'operational' definitions

Operational definitions **A component of** **Contemporary classificatory systems**



LEWIS

Aubrey Lewis
First Director
Institution of Psychiatry

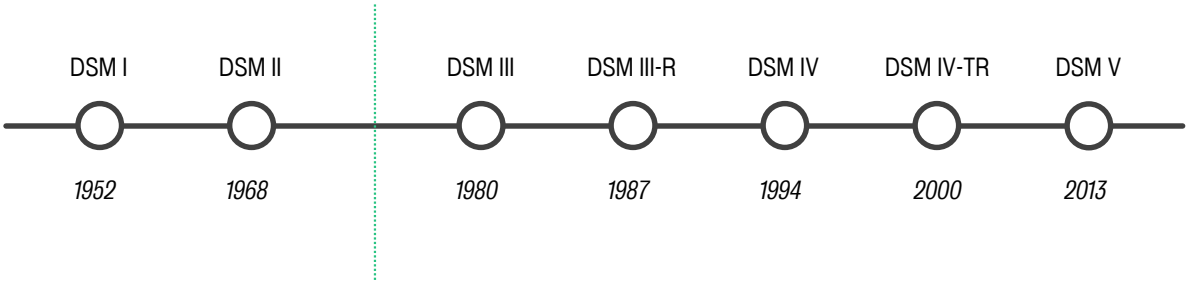
> *The public classification is likely to be one that will not lead to any ambiguity …*
>
> *In psychiatry to make a classification based on theory is what we all would like, and what we believe we cannot at the moment attain—because, as Dr [Karl] Hempel clearly stated, the requirements are not met by any of the theories prevailing in psychiatry at the present time. Therefore I would suggest that for the purpose of public classification we should eschew categories based on theoretical concepts and restrict ourselves to the operational, descriptive type of classification …*

1961 *– Attended a seminar on classificatory systems*

Diagnostic and Statistical Manual - DSM

History of DSM

DSM Project



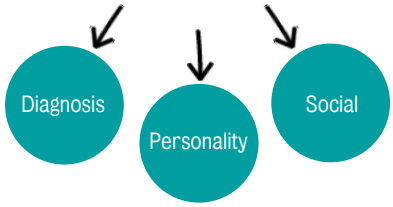
Changed in character

Diagnostic and Statistical Manual - DSM III

DSM III introduced important innovations

Explicit diagnostic criteria

Multiaxial diagnostic assessment system



Neutral with respect to the causes of mental disorders

> *...this effort was aided by extensive work on constructing and validating the diagnostic criteria and developing psychiatric interviews for research and clinical uses.*

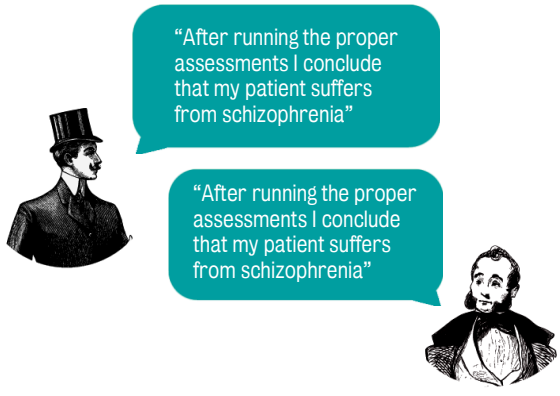
American Psychiatric Association (n.d.)

Diagnostic and Statistical Manual - DSM IV (1)

Some 20 years on in a paper written by those planning DSM 5, strengths and a crucial weakness of DSM II were summarised:

> *The DSM-III diagnostic system adopted a so-called neo-Kraepelinian approach to diagnosis. This approach avoided organizing a diagnostic system around hypothetical but unproven theories about etiology in favor of a descriptive approach, in which disorders were characterized in terms of symptoms...*
>
> *...The major advantage of adopting a descriptive classification was its improved reliability over prior classification systems using non-operationalized definitions of disorders based on unproved etiological assumptions. From the outset, however, it was recognized that the primary strength of a descriptive approach was its ability to improve communication among clinicians and researchers, not its established validity.*

What we have now is A diagnostic system whereby:



However, this does not mean that there is an underlying entity 'platonic ideal' of schizophrenia.

Kupfer et al. (2002)

Diagnostic and Statistical Manual - DSM IV (2)

Published in 1994

- six-year effort
- 1,000 individuals
- numerous professional organisations

Numerous changes were made to:

- the classification
- the diagnostic criteria sets
- descriptive text

Developers of DSM-IV and ICD-10 worked closely together to:

- increase congruence
- reduce meaningless differences in wording between the two

> *DSM-IV was published in 1994. It was the culmination of a six-year effort that involved more than 1,000 individuals and numerous professional organizations. Much of the effort involved conducting a comprehensive review of the literature to establish a firm empirical basis for making modifications. Numerous changes were made to the classification (e.g., disorders were added, deleted, and reorganized), to the diagnostic criteria sets, and to the descriptive text. Developers of DSM-IV and the 10th edition of the ICD worked closely to coordinate their efforts, resulting in increased congruence between the two systems and fewer meaningless differences in wording. ICD-10 was published in 1992.*

DSM IV was more of the same but a bit different

American Psychiatric Association (n.d.)

Diagnostic and Statistical Manual - DSM-5 (1)

Was supposed to be something different

It started with grand ambitions

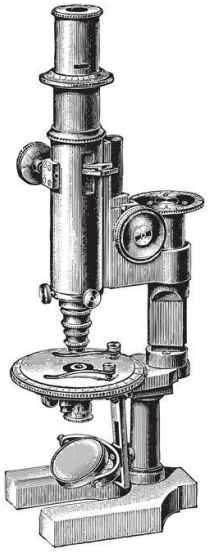
A series of responses to DSM 5 by experts at the time of its publishing

> *When the DSM-5 process was launched several years ago, the clear hope by all involved was that, finally, psychiatric diagnoses would include, in addition to signs and symptoms, various biomarkers of the major disorders including schizophrenia, bipolar disorder, and major depression, with reasonable measures of sensitivity and specificity.*
>
> *Because the risk for these disorders has a major genetic component, it seemed plausible to anticipate including specific genetic markers such as single nucleotide polymorphisms or structural genomic abnormalities, (for example, copy number variations), that increase disease vulnerability and perhaps denote biologically distinct alternative phenotypes.*

> *This unbridled enthusiasm followed on the heels of the sequencing of the human genome and the then-existing strong belief that many complex diseases in medicine would be simplified by the results of genome-wide association studies…*
>
> *…Moreover, our understanding of the underpinnings of the genetic basis of disease vulnerability and treatment response has become considerably more sophisticated because of, to name a few emerging disciplines, epigenetics, non-coding RNAs, microRNAs, transcriptomics, and proteomics.*
>
> *Similar disappointments occurred in an earlier wave of unbridled enthusiasm from brain imaging studies, both structural and functional, which yielded much about the neurobiology of the major psychiatric disorders, but without any pathognomonic findings.*

Nemeroff et al. (2013)

Diagnostic and Statistical Manual - DSM-5 (2)



DSM-5 was unable to use new technologies

Genetic
Functional imaging

Ultimately DSM-5 wasn't much different

✓ Changes to the classificatory system on the basis of emerging evidence and expert opinion

✗ Find biomarkers for/underlying the 'phenotypes' of mental disorder

End of part 1