What society's appointed experts/authorities say depression is

- * Depression is a *medical illness*
- * Depression is a *(medical) disease*
- * Depression is a *leading cause of disability* and *burden of disease globally*
- * Depression is a *mental illness*
- * Depression is a *mental disorder*
- * Depression is a *mood disorder*
- * Depression is a *biological and therefore medical illness*
- * Depression is a <u>brain disease/brain disorder</u>
 - * Depression is a brain chemical imbalance
 - * Depression is a *genetic and therefore medical illness*
 - * Depression is a *medical illness just like diabetes*
 - * Depression can be *endogenous or reactive*
 - * There is *no cure for depression*

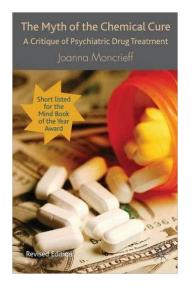
What is a medical disease/medical illness?



Dr. Joanna Moncrieff

UK psychiatrist

Disease definition within medicine



"According to the emerging scientific view of the late 19th and early 20th century, a disease was seen as a collection of <u>distinct symptoms</u>

caused by a <u>biological mechanism</u>

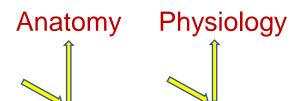
that could be <u>identified anatomically and physiologically</u>"

(STRUCTURE) (FUNCTION)

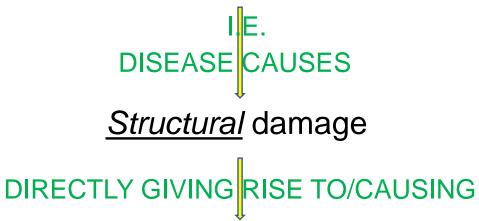
Dr. Joanna Moncrieff, psychiatrist, *The Myth of the Chemical Cure: A Critique of Psychiatric Drug Treatment,* Basingstoke: Palgrave Macmillan, 2009, p. 45.



Definition of *disease*



A disorder of structure or function in a human, animal, or plant, especially one that produces specific symptoms or that affects a specific location



Functional impairment/impairment of <u>function</u>

Cause identification not a prerequisite to qualify as a disease

http://www.oxforddictionaries.com/definition/english/disease



disease

a definite pathological process having a characteristic set of signs and symptoms.

It may affect the whole body or any of its parts

Collection of distinct <u>symptoms</u>

Collection of <u>distinct signs</u>

Caused by a *biological mechanism* — Identify of cause not a prerequisite

A definite *pathological process*

That could be *identified anatomically* — Abnormal/diseased *structure*

That could be *identified physiologically* — Abnormal/compromise function

Affects the whole body or a specific location/tissue

Collection of <u>distinct tests/investigations</u>

CONFIRM

How a disease is diagnosed

Collection of distinct symptoms

Collection of <u>distinct signs</u>

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As a general rule

ALL MEDICAL SPECIALTIES

Making a medical diagnosis

All three pillars involved in the diagnostic process



- 1. History
- 2. Examination
- 3. Investigations

Some general principles

For most diseases, all *three pillars* contribute to the diagnosis

Two pillars contributing – not uncommon

Diagnosis based on <u>one pillar</u> – much less common but does happen



Tests/investigations (Third pillar)



Some general principles

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Tests/investigations (Third pillar)

Very rarely on history alone



Some general principles

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GENERALLY

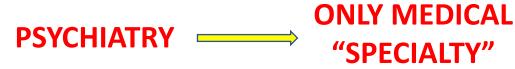
Tests/investigations (Third pillar)

Very rarely on history alone Scientifically much weaker

HISTORY TYPICALLY STRIKING AND SPECIFIC
FOR EXAMPLE

Epileptic seizure

Classic migraine headaches









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- → Collection of <u>distinct tests/investigations</u> CONFIRM
 - Diagnosed via the three pillars of medical diagnosis

Multiple Sclerosis (M.S.)

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SPECIFIC LOCATION

Multiple sclerosis

Multiple sclerosis (MS) is a potentially disabling disease of the brain and spinal cord (central nervous system).

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In MS, the immune system attacks the protective sheath (myelin) that covers nerve fibers

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PROCESS
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ABNORMALITIES OF STRUCTURE

ABNORMALITIES permanent damage or deterioration of the nerves.

STRUCTURE

Multiple sclerosis - Symptoms and causes - Mayo Clinic

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SPECIFIC LOCATION

Multiple sclerosis

Multiple sclerosis (MS) is a potentially disabling disease of the brain and spinal cord (central nervous system).

ABNORMALITIES OF FUNCTION

In MS, the immune system attacks the protective sheath (myelin) that covers nerve fibers and causes communication problems between your brain and the rest of your body.

ABNORMALITIES OF STRUCTURE Eventually, the disease can cause permanent damage or deterioration of the nerves.

DISEASE
PROCESS
IDENTIFIED
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ABNORMALITIES

OF

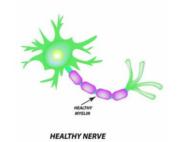
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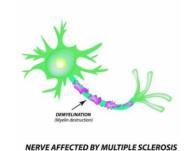
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Multiple Sclerosis





Specific location/organ: brain/nervous system

Abnormalities of structure: damage to sheaths that cover/protect nerve fibers

Abnormalities of function: interferes with normal nerve cell functioning

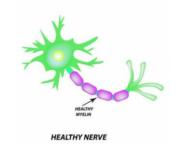
GIVING RISE TO

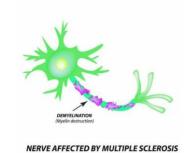
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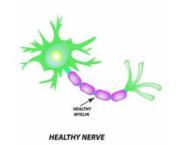
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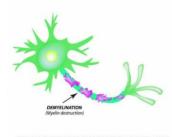
Distinct signs: measurable weakness limp sensation changes

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Multiple Sclerosis





NERVE AFFECTED BY MULTIPLE SCLEROSIS

Specific location/organ: brain/nervous system

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GIVING RISE TO

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Investigations: MRI scan consistent findings

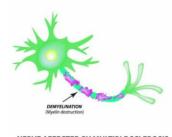
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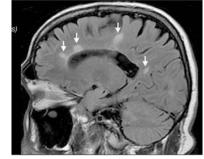
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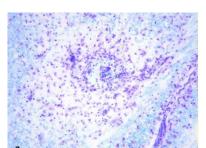
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characteristic brain abnormalities at post-mortem



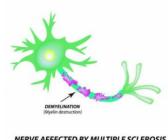


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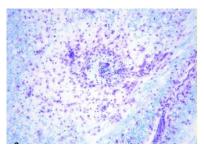
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abnormalities of both structure and function scientifically confirmed

Diagnosis: rock solid scientifically —VIA The three pillars of medical diagnosis

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An ischemic stroke occurs when the blood supply to part of the brain is interrupted or reduced, preventing brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes.

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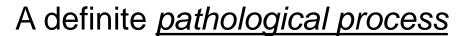
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Abnormalities of structure: burst blood vessel leading to brain tissue death

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GIVING RISE TO

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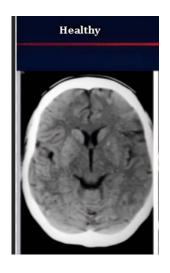
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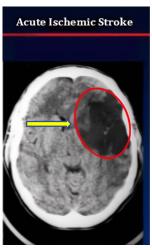


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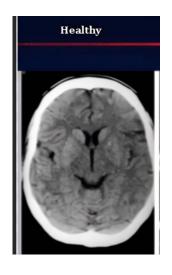


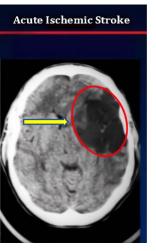
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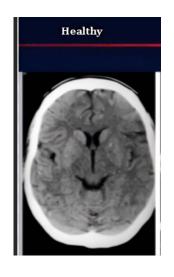


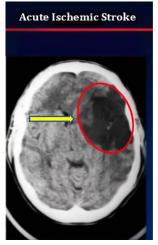
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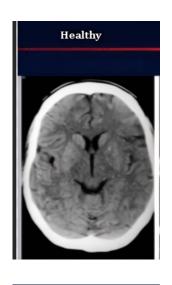


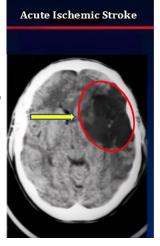
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Investigations: brain scan consistent findings

characteristic brain abnormalities found at post-mortem





abnormalities of both structure and function scientifically confirmed

Diagnosis: rock solid scientifically

- Collection of distinct <u>symptoms</u> ✓
 Collection of <u>distinct signs</u>
 - Caused by a <u>biological mechanism</u> Identify of cause not a prerequisite
 - A definite *pathological process*
 - That could be *identified anatomically* —— Abnormal/diseased *structure*
 - That could be <u>identified physiologically</u> Abnormal/compromised function
 - Affects the whole body or a specific location/tissue
- Collection of *distinct tests/investigations*
 - Diagnosed via the three pillars of medical diagnosis

Specific location/organ: brain

Abnormalities of structure: burst blood vessel leading to brain tissue death

Abnormalities of function: interferes with normal brain cell functioning

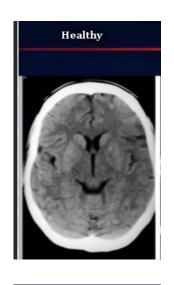


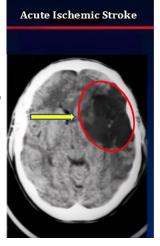
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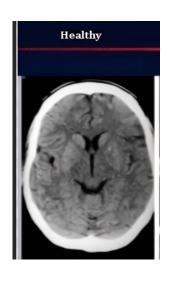


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 - Affects the whole body or a specific location/tissue
- Collection of *distinct tests/investigations*
 - Diagnosed via the three pillars of medical diagnosis

Stroke

Specific location/organ: brain

Abnormalities of structure: burst blood vessel leading to brain tissue death

Abnormalities of function: interferes with normal brain cell functioning

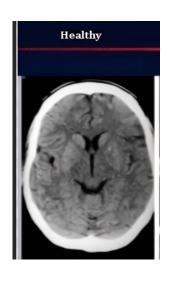


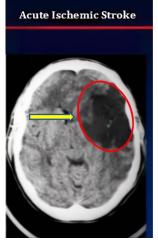
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Distinct signs: measurable weakness observable physical changes

Investigations: __brain scan consistent findings

characteristic brain abnormalities found at post-mortem





abnormalities of both structure and function scientifically confirmed

Diagnosis: rock solid scientifically



Parkinson's disease

Parkinson's disease is a progressive disorder that affects the nervous system and the parts of the body controlled by the nerves.

In Parkinson's disease, certain nerve cells (neurons) in the brain gradually break down or die.

Structural damage/change

GIVES RISE TO/CAUSES

<u>Functional</u> impairment/impaired function(ing)

Due to the structural tissue damage

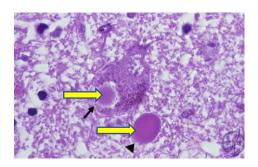
Parkinson's disease - Symptoms and causes - Mayo Clinic

Other brain diseases

Parkinson's Disease



Tremor Gait Stiffness Balance Movements Specific brain tissue findings post mortem



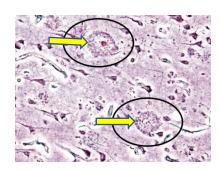
Alzheimers Disease



Progressive major cognitive decline

May show on brain scans

Specific brain cell changes on post-mortem



Key characteristics of a medical disease/illness

Collection of distinct <u>symptoms</u>

Collection of <u>distinct signs</u>

Caused by a *biological mechanism* — Identify of cause not a prerequisite

A definite *pathological process*

That could be *identified anatomically* — Abnormal/diseased *structure*

That could be *identified physiologically* — Abnormal/compromised function

CONFIRM

Affects the whole body or a specific location/tissue

Collection of <u>distinct tests/investigations</u>

Diagnosed via the three pillars of medical diagnosis

Depression

Specific location/organ: Brain – claimed to be

Abnormalities of structure: None scientifically identified

Abnormalities of function: None scientifically identified



Key characteristics of a medical disease/illness

- Collection of distinct <u>symptoms</u>
- Collection of <u>distinct signs</u>
- Caused by a <u>biological mechanism</u> Identify of cause not a prerequisite A definite <u>pathological process</u>
- → That could be *identified anatomically* → Abnormal/diseased *structure*
- → That could be <u>identified physiologically</u> → Abnormal/compromised <u>function</u>

CONFIRM

- Affects the <u>whole body</u> or a <u>specific location/tissue</u>
- Collection of <u>distinct tests/investigations</u>

Diagnosed via the three pillars of medical diagnosis

Depression

Specific location/organ: Brain – claimed to be

Abnormalities of structure: None scientifically identified

Abnormalities of function: None scientifically identified





Distinct signs: No distinct physical/biological signs

Investigations: None carried out

No identified abnormalities in structure/function to work with



Key characteristics of a medical disease/illness

- → Collection of distinct <u>symptoms</u>
- → Collection of <u>distinct signs</u>
 - Caused by a <u>biological mechanism</u> Identify of cause not a prerequisite A definite <u>pathological process</u>
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 - That could be <u>identified physiologically</u> Abnormal/compromised <u>function</u>
 - Affects the whole body or a specific location/tissue
- → Collection of <u>distinct tests/investigations</u> Confirm
- Diagnosed via the three pillars of medical diagnosis

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Never confirmed in pathology/biochemistry lab



Key characteristics of a medical disease/illness

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 - That could be *identified anatomically* Abnormal/diseased *structure*
 - That could be *identified physiologically* Abnormal/compromise function

CONFIRM

- Affects the whole body or a specific location/tissue
- Collection of distinct tests/investigations

Diagnosed via the three pillars of medical diagnosis

Depression

Specific location/organ: Brain – claimed to be

Abnormalities of structure: None scientifically identified

Abnormalities of function: None scientifically identified





Distinct signs: No distinct physical/biological signs

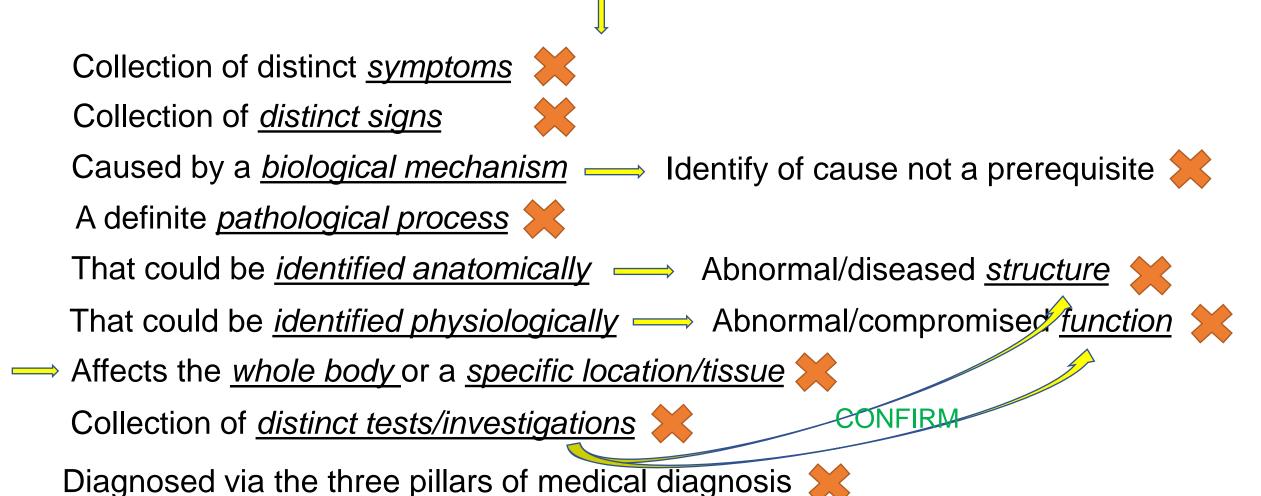
Investigations: None carried out

No identified abnormalities in structure/function to work with

Never confirmed in pathology/biochemistry lab



Key characteristics of a medical disease/illness



Depression

Specific location/organ: Brain - claimed to be

Abnormalities of structure: None scientifically identified

Abnormalities of function: None scientifically identified



Distinct symptoms: No distinct physical/biological symptoms

Distinct signs: No distinct physical/biological signs

Investigations: None carried out

No identified abnormalities in structure/function to work with

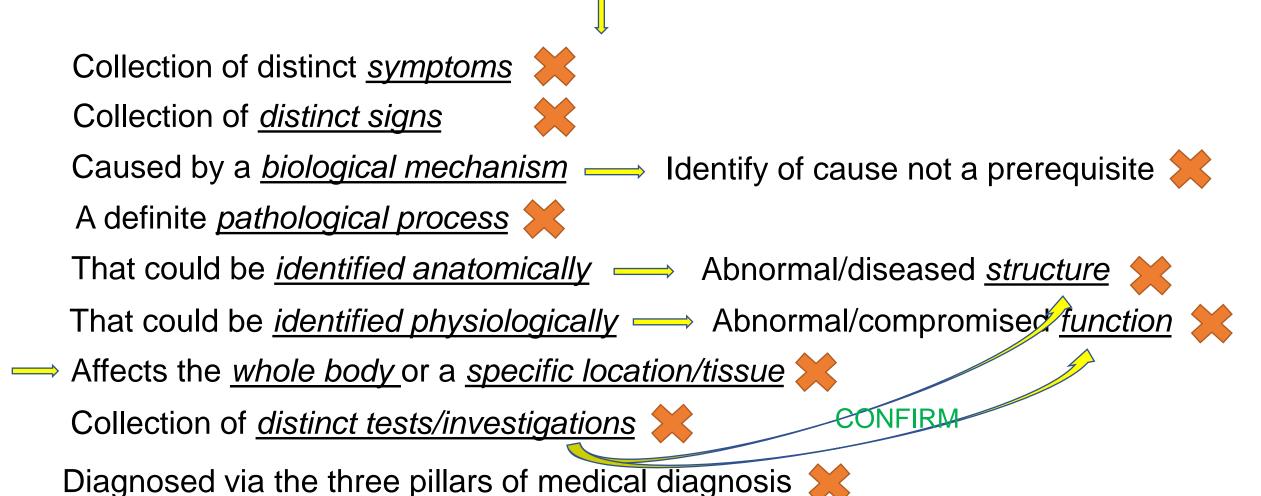
Never confirmed in pathology/biochemistry lab

Diagnosis: Totally unestablished scientifically

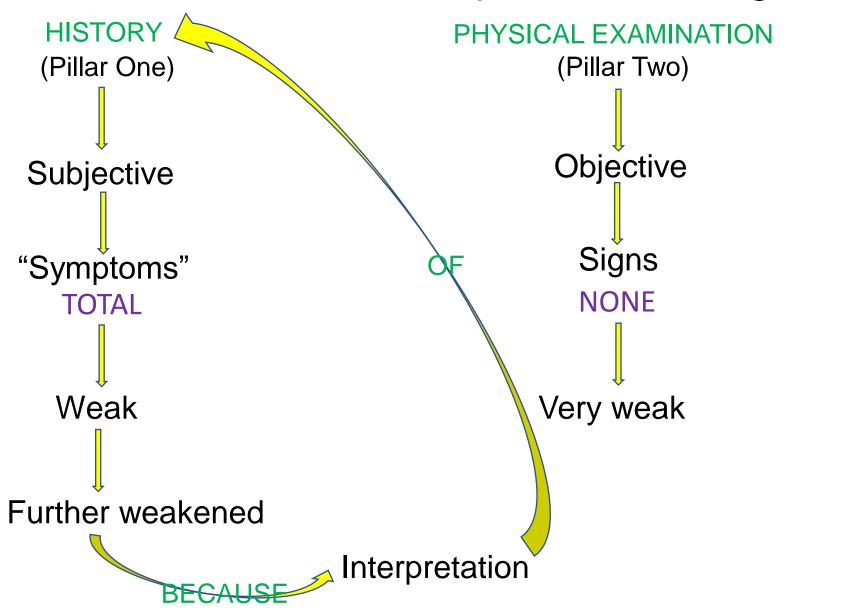
Science has no relevance/input

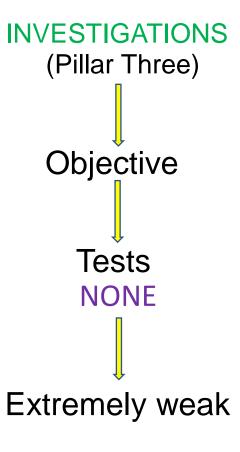


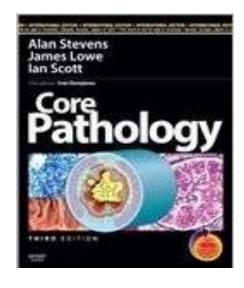
Key characteristics of a medical disease/illness



How depression is diagnosed







Pathology

632 pages
33 copies in University of Limerick library
25 chapters

"Nervous system and muscle" chapter (42 pages)

All known biological conditions

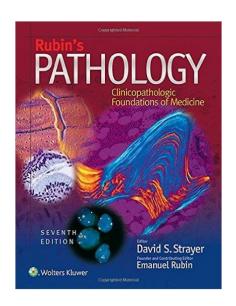
Depression not mentioned

No pathological findings characteristic of depression

Index: Not a sin

Not a single index entry for depression 33 entries for "brain", depression not mentioned here or in the 14 index entries for "cerebral"

Core Pathology, Third Edition (2009), Alan Stevens, James Lowe & Ian Scott, Mosby Elsevier



Rubin's Pathology

1,341 pages
30 chapters
"Nervous System" chapter

76 pages 78 sub-headings

No mention of any pathological findings for depression anywhere in this chapter or anywhere else in this pathology textbook

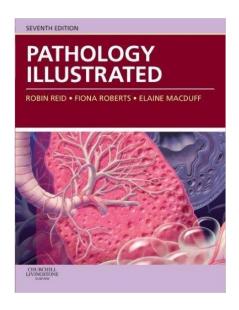
Index

Extensive, 62-page

no entry for depression none refer to depression

21 index entries for "brain"

Rubin's Pathology: Clinicopathologenic Foundations of Medicine, Fifth Edition (2008)



Pathology Illustrated

670 pages 16 chapters

"Nervous System" chapter 60 pages nervous system diseases biological abnormalities depression not mentioned anywhere

Index: 14 entries for "brain"

0 entries for depression

Expected: ———— No known brain or other pathology identified for depression

Pathology Illustrated (2011), Robin Reid et al (eds), Churchill Livingstone Elsevier.

Is depression caused by functional abnormalities in the brain?

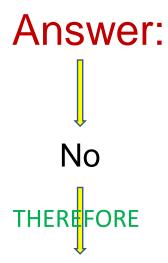
Pathology

Identified abnormalities in structure and function of body organs/tissue

No brain structural abnormality identified in depression No brain functional abnormality identified in depression

Question:

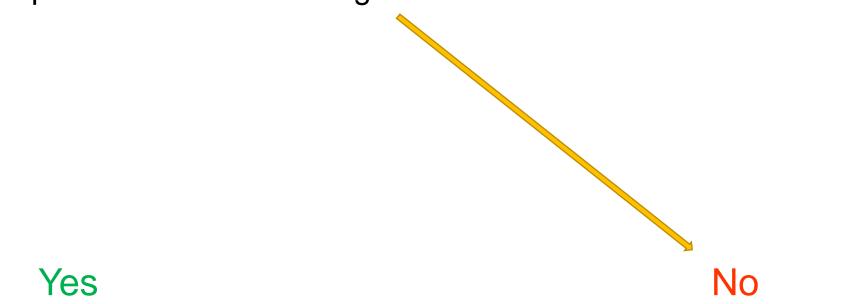
Does depression meet the long-established medical criteria for a brian disease?



Depression is NOT a verified brain disease/illness Should never be stated to so be

Conclusion

Depression meets the long-established criteria for a disease?



Three reputable sites



Brain disorders

- 1. National Institute of Neurological Disorders and Stroke
- 2. Brain Migraine & Headache Australia
- 3. WebMD°

Three reputable sites

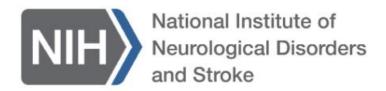


Brain disorders

National Institute of Neurological Disorders and Stroke



3. WebMD

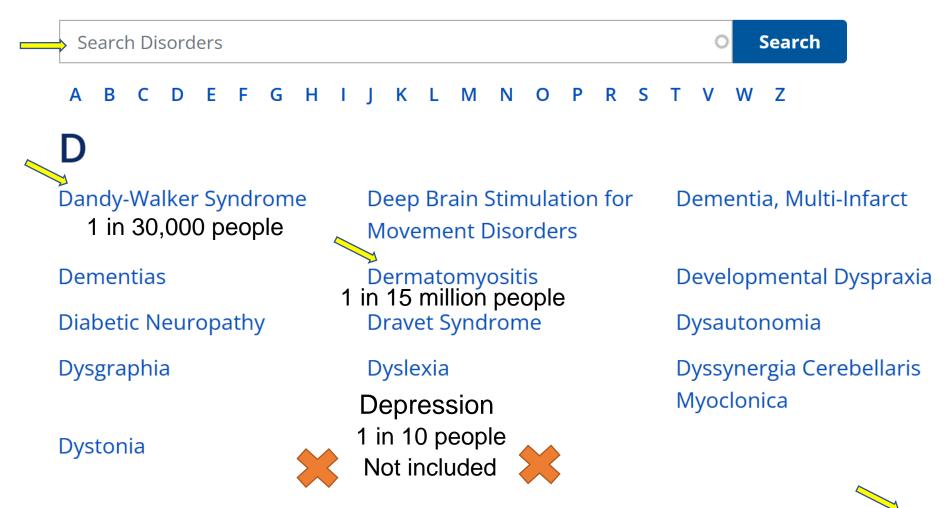


All Disorders

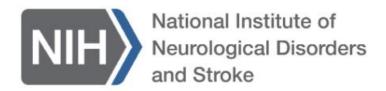




All Disorders



All Disorders | National Institute of Neurological Disorders and Stroke (nih.gov)



All Disorders



Three reputable sites



Brain disorders

1. National Institute of Neurological Disorders and Stroke





3. WebMD

The Brain Foundation



A-Z Disorders

The Brain Foundation's A-Z of Brain Disorders aims to provide a resource for people newly-diagnosed with brain-related disorders, their friends and relatives, and health professionals.

reviewed by medical experts

ABCDEFGHIJKLMNOPQRSTUVWX YZ

SELECT LETTER ABOVE TO JUMP TO THAT SECTION

Brain Disorders, Comprehensive Information - Brain Foundation

The Brain Foundation



C

<u>Cerebral Lupus</u> <u>Charcot-Marie-Tooth Disorder</u>

1 in 1,214 people

<u>Cluster Headache</u>

<u>Creutzfeldt-Jakob Disease</u>

D

<u>Dementia (Non-Alzheimer type)</u> <u>Dyspraxia</u> <u>Cerebral Palsy</u> Chiari Malformation

Coma

Depression: 1 in 10 people
Not included anywhere

<u>Down Syndrome</u> <u>Dystonia</u>

1 in 25,000 people



Cervical Dystonia

Chronic Inflammatory Demyelinating

Polyneuropathy 1 in 17,000 people

Concussion

<u>Dyslexia</u>

Brain Disorders, Comprehensive Information - Brain Foundation

Three reputable sites



Brain disorders

- 1. National Institute of Neurological Disorders and Stroke
- 2. Brain Migraine Mig
- → 3. WebMD



Brain Diseases

Written by Matthew Hoffman, MD
Medically Reviewed by Jabeen Begum, MD on March 20, 2023

Brain Diseases: Seizures Brain Diseases: Trauma

Brain Diseases: Tumors, Masses, and Increased Pressure

Brain Diseases: Vascular (Blood Vessels) Conditions

Brain Diseases: Autoimmune Conditions

Brain Diseases: Neurodegenerative Conditions

Brain Diseases (webmd.com)



Brain Diseases

Written by Matthew Hoffman, MD Medically Reviewed by Jabeen Begum, MD on March 20, 2023

Brain Diseases: Trauma Brain Diseases: Seizures

Brain Diseases: Tumors, Masses, and Increased Pressure

Brain Diseases: Vascular (Blood Vessels) Conditions

Brain Diseases: Autoimmune Conditions

Brain Diseases: Neurodegenerative Conditions

Brain abscess: 1 in 100,000 people Vasculitis: 1 in 17,000 people Multiple Sclerosis: 1 in 50,000 people

Depression: 1 in 10 people 💢

Brain Diseases (webmd.com)

How could it be



Uncommon/rare brain disorders

FOR EXAMPLE

Brain abscess: 1 in 100,000 people

Multiple Sclerosis: 1 in 50,000 people

Demyelinating Polyneuropathy: 1 in 17,000 people

Dystonia: 1 in 25,000 people

ARE OFFICIALLY LISTED AS BRAIN DISORDERS BUT . . .

Depression: 1 in 10 people



Any official scientifically verified list of brain disorders



Three reputable sites



Brain disorders





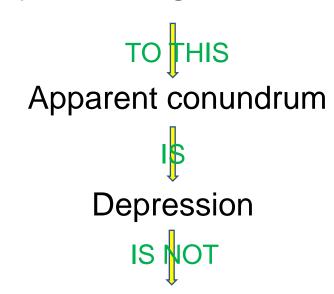


Why no reference to depression?



"Depression" is NOT a verified brain disease/medical disease/illness

Only one logical answer

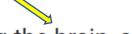


A scientifically verified brain disorder

(More on this a little later)



NEUROLOGY



Neurology is the branch of medicine that deals with disorders of the nervous system, including the brain, spinal cord, peripheral nerves and muscles.

Neurology - Oxford University Hospitals (ouh.nhs.uk)



Mental health: neurological disorders



Neurological disorders are diseases of the central and peripheral nervous system. In other words, the brain, spinal cord, cranial nerves, peripheral nerves, nerve roots, autonomic nervous system, neuromuscular junction, and muscles. These disorders include epilepsy, Alzheimer disease and other dementias, cerebrovascular diseases including stroke, migraine and other headache disorders, multiple sclerosis, Parkinson's disease, neuroinfections, brain tursours, traumatic disorders of the nervous system due to head trauma, and neurological disorders as a result of malnutrition.

Hundreds of millions of people worldwide are affected by neurological disorders. More than 6 million people die because of stroke each year; over 80% of these deaths take place in low- and middle-income countries. More than 50 million people have epilepsy worldwide. It is estimated that there are globally 47.5 million people with dementia with 7.7 million new cases every year - Alzheimer's disease is the most common cause of dementia and may contribute to 60–70% of cases. The prevalence of migraine is more than 10% worldwide.

No mention of any "mental illnesses"

http://www.who.int/features/ga/55/en/



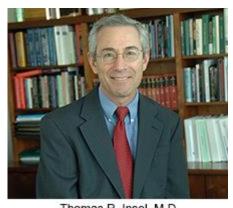
What is a Neurologist?

A neurologist is a highly trained doctor with specialized training in diagnosing complex conditions of the brain and spinal cord (the central nervous system), peripheral nerves (nerves connecting the brain and spine to the organs, like the lungs or liver), and muscles.



Neuroscience

Neuroscience (or neurobiology) is the scientific study of the nervous system. It is a multidisciplinary science that combines physiology, anatomy, molecular biology, developmental biology, cytology, computer science and mathematical modeling to understand the fundamental and emergent properties of neurons and neural circuits.



Thomas R. Insel, M.D. NIMH Director

2017 Dr. Thomas Insel

Director, National Institute of Mental Health, USA.

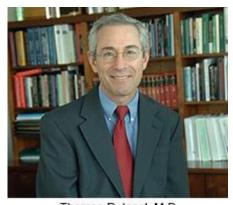


Gregg Henriques Ph.D.Theory of Knowledge

May 23, 2017

Twenty Billion Fails to "Move the Needle" on Mental Illness

"I spent 13 years at NIMH really pushing on the neuroscience and genetics of mental disorders, and when I look back on that I realize that while I think I succeeded at getting lots of really cool papers published by cool scientists at fairly large costs—I think \$20 billion—



Thomas R. Insel, M.D. NIMH Director

2017 Dr. Thomas Insel

Director, National Institute of Mental Health, USA.



Gregg Henriques Ph.D. Theory of Knowledge

May 23, 2017

Twenty Billion Fails to "Move the Needle" on Mental Illness

I don't think we moved the needle in reducing suicide, reducing hospitalizations, improving recovery for the tens of millions of people who have mental illness."

'I hold myself accountable for that."



Thomas R. Insel, M.D NIMH Director

2017 Dr. Thomas Insel

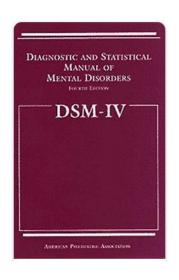
Director, National Institute of Mental Health, USA.

Gregg Henriques Ph.D. Theory of Knowledge

May 23, 2017

Twenty Billion Fails to "Move the Needle" on Mental Illness

If this is not evidence that we need to stop reducing the human mind to the brain, I don't know what would be.





Oct 19, 2021

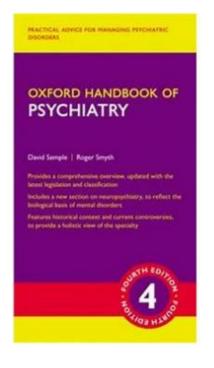
My amplification of NIMH Director's confession:

1)40 yrs of Neuroscience/Genetics research hasn't yet helped a single patient

(1) Allen Frances on Twitter: "My amplification of NIMH Director's confession: 1)40 yrs of Neuroscience/Genetics research hasn't yet helped a single patient 2)Proves no low hanging fruit/no quick breakthrus 3)Rebalance funding to include clinical/services/public health research 4)Reduce hype re "cool" research" / Twitter

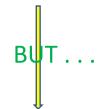


Dr. David Semple Psychiatrist



Dr. Roger Smyth
Psychiatrist

"Most mental diagnoses have had their validity questioned at several points in history"

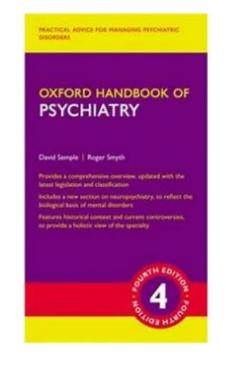


Established biological diseases do not have their validity questioned

Semple, David, and Smyth, Roger, *Oxford Handbook of Psychiatry*, 4th Edition, 2019, Oxford University Press, p. 6.



Dr. David Semple Psychiatrist





Dr. Roger Smyth

Psychiatrist



"All psychiatric illnesses are, by their nature, organic"



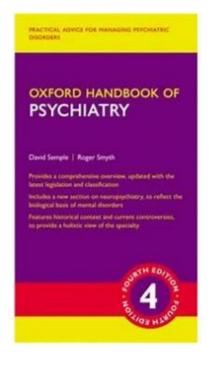
They involve abnormalities of brain structure or function"



Semple, David, and Smyth, Roger, *Oxford Handbook of Psychiatry*, 4th Edition, 2019, Oxford University Press, p. 126



Dr. David Semple Psychiatrist

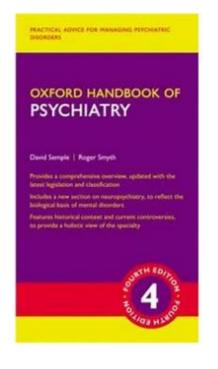


Dr. Roger Smyth Psychiatrist

"Diagnosed by doctors on the basis of symptoms alone, some people find their presence difficult to accept in a field which has been almost universally successful in finding demonstrable physical pathology or infection"



Dr. David Semple Psychiatrist



Dr. Roger Smyth Psychiatrist

"This argument, that psychiatric diagnoses are invalid, still strikes a chord with many doctors and non-medical academics"

Semple, David, and Smyth, Roger, *Oxford Handbook of Psychiatry*, 4th Edition, 2019, Oxford University Press, p. 6



Dr. Muiris Houston

Irish GP
Irish Times medical correspondent

"Depression, in my view, is no different from diabetes.

In one you take insulin and in the other you take Prozac or some other antidepressant.

Both substances are simply designed to replace natural chemicals missing from the body"

Utterly unestablished/unverified scientifically
Utter conjecture

Dr. Muiris Houston, Irish Times, 17 December 2001



Dr. Alan Wade

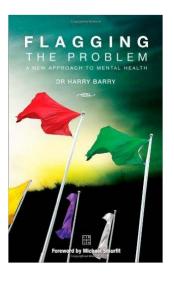
GP, Scotland

Depression

"The *fact* that depressive illnesses have a physical cause just like diabetes or any other disease".



Dr. Harry Barry
Irish GP author, mental health "expert"



"Just as diabetes is an illness caused by biological abnormalities in our pancreas, depression, anxiety and addiction are illnesses caused at least in part by biological abnormalities of the brain."

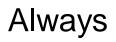
Harry Barry, Flagging the Problem: A New Approach to Mental Health, Dublin: Liberties Press, 2007.

Diabetes

Depression

- * Chemical imbalance scientifically/reliably verified
- * Normal levels scientifically verified
- * Abnormal levels scientifically verified
- * Reliable test(s) available
- * Diagnosis confirmed by lab/other tests
- * Level of treatment guided by lab/other tests





Always



Never

Never

If doctors diagnosed diabetes like they diagnose depression

Medical negligence cases +++

Doctors struck off medical register +++

Chaotic patient care

Deaths +++ and serious complications +++



Dr. Muiris Houston

Irish GP *Irish Times* medical correspondent



"Depression, in my view, is no different from diabetes.



In one you take insulin and in the other you take Prozac or some other antidepressant.



Both substances are simply designed to replace natural chemicals missing from the body"



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Dr. Alan Wade

GP, Scotland

Depression

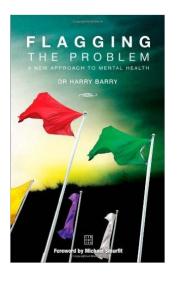


"The *fact* that depressive illnesses have a physical cause just like diabetes or any other disease".





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Irish GP author, mental health "expert"



"Just as diabetes is an illness caused by biological abnormalities in our pancreas, depression, anxiety and addiction are illnesses caused at least in part

by biological abnormalities of the brain."

Harry Barry, Flagging the Problem: A New Approach to Mental Health, Dublin: Liberties Press, 2007.

What society's appointed experts/authorities say depression is

- *Depression is a *medical illness*
- *Depression is a *(medical) disease*
- * Depression is a *leading cause of disability* and *burden of disease globally*
- * Depression is a *mental illness*
- * Depression is a *mental disorder*
- * Depression is a *mood disorder*
- * Depression is a *biological and therefore medical illness* 💥
- * Depression is a <u>brain disease/brain disorder</u>
- * Depression is a brain chemical imbalance
- * Depression is a *genetic and therefore medical illness*
 - * Depression is a *medical illness just like diabetes*
 - * Depression can be *endogenous or reactive*
 - * There is no cure for depression