

PGNIP2

PG notes in PSYCHIATRY
2nd Edition

Cijo Alex



INDIA • SINGAPORE • MALAYSIA



Notion Press

Old No. 38, New No. 6
McNichols Road, Chetpet
Chennai - 600 031

First Edition 2015
Second Edition Published by Notion Press 2019
Copyright © Cijo Alex 2019
All Rights Reserved.

ISBN 978-1-64546-974-2

This book has been published with all efforts taken to make the material error-free after the consent of the author. However, the author and the publisher do not assume and hereby disclaim any liability to any party for any loss, damage, or disruption caused by errors or omissions, whether such errors or omissions result from negligence, accident, or any other cause.

No part of this book may be used, reproduced in any manner whatsoever without written permission from the author, except in the case of brief quotations embodied in critical articles and reviews.

Dedicated to

Prof. R. Kumar who taught me Psychiatry, and more!

CONTENTS

Foreword	xvii
Preface to the First Edition	xix
Preface	xxi

SECTION 1: PRELUDE

1. History of Psychiatry	3
Introduction	3
Age of Rationalism	4
The Dark Ages	4
Age of Enlightenment	5
Nobel Laureates	6
The Indian Scenario	6
Antipsychiatry	7
References	8
Who is Who?	10
Who is Who?	11
2. Clinical Examination	13
Introduction	13
The Patient Doctor Relationship	13
Transference and Counter Transference	14
Interviewing Techniques	15
Types of Questions	15
Insight	16
Structured Assessment Tools	17
References	17
3. General Psychopathology	19
Introduction	19
Perception	19
Hallucinations	21
Thought	24
Delusions	25
Memory	29
References	31

4. Philosophy of Psychiatry	33
Introduction	33
Society and Psychiatry	33
Sociological Theories	36
Ethics	37
Human Rights	38
Illness and society	38
Residential Institutions	39
Controversial Studies	40
References	41
5. Classificatory Systems	43
Introduction	43
ICD	43
DSM	48
Research Domain Criteria	50
Chinese Classification of Mental Disorders	50
References	50

SECTION 2: BASIC MEDICAL SCIENCES

6. Neuroanatomy	53
Introduction	53
Embryology	53
Nervous System Cells	54
Surface Anatomy of Brain	55
Lobar Functions	56
Limbic System	59
Basal Ganglia	62
Diencephalon	63
Ventricular System	65
Cerebral Blood Supply and Venous Drainage	65
Cranial Nerves and Spinal Cord	66
Visual Pathway	67
References	68
7. Neurophysiology	69
Introduction	69
Autonomic Nervous System	69
Reticular Activating System	70
Neuroendocrinology	71
Neuroimmunology	71
Chronobiology and Circadian Rhythm	72
Sleep	74
Sexuality	75
Aggression	77
Memory	77
Addictions	78
References	79

8. Neurochemistry	81
Introduction	81
Neurotransmitters	81
Second Messengers	90
Novel Neurotransmitters	90
References	92
9. Genetics	93
Introduction	93
Basic Concepts and Definitions	93
Patterns of Inheritance	95
Study Designs	96
Molecular Techniques	96
Genetics of Psychiatric Disorders	97
Genetic Conditions Relevant to Psychiatry	99
Genetic Counseling	100
Mendelian Paradox	100
References	101
10. Research Methodology	103
Epidemiology	103
Introduction	103
Study Designs	103
Levels of Evidence	106
Sources of Evidence	107
Bias	108
Confounding	109
Sampling	109
Cause Effect Relationship	110
Data Collection	111
References	111
Biostatistics	111
Introduction	111
Research Hypothesis	111
Types of Statistics	112
Types of Data	112
Types of Variables	112
Descriptive Statistics	112
Normal Distribution	113
Errors in Statistics	114
Tests of Significance	114
Correlation and Regression	116
Qualitative Methods	117
References	117

SECTION 3: PSYCHOLOGY

11. Introduction to Psychology	121
Introduction	121
Schools of Psychology	121
Influential Psychologists	122
References	123
12. Psychoanalysis	125
Introduction	125
Sigmund Freud	125
Glossary of terms	125
The beginning	126
Interpretation of dreams	126
Topographical model	127
Structural model	127
Instinct or drive theories	128
Psychosexual stages	128
Defence mechanisms	129
Erik Erikson	130
Jean Piaget	131
Neo Freudians	131
References	132
13. Personality	133
Introduction	133
Theories of personality	133
References	135
14. Learning	137
Introduction	137
Behavioural theories	137
Cognitive theories	139
Social learning theories	140
References	140
15. Intelligence	141
Introduction	141
Theories of intelligence	141
Measurement of intelligence	142
Emotional intelligence	143
References	143
16. Social Psychology	145
Introduction	145
Attitude	145
Attribution	146
Leadership	147
Intergroup behavior and prejudice	147
Helping behaviors	147

Social influence and power	148
Obedience and conformity	148
Group processes	148
Group dynamics	149
Parenting	149
References	150
17. Other Psychology Topics	151
Introduction	151
Emotions	151
Motivation	152
Memory	153
Learned helplessness	154
Attachment theory	155
References	157
18. Psychodiagnostics	159
Introduction	159
Qualities of rating scales	159
Personality assessment tools	160
Tests of intelligence	162
Neuropsychological testing	163
References	164

SECTION 4: CLINICAL PSYCHIATRY

19. Psychotic Disorders	167
Introduction	167
Historical evolution	167
Epidemiology	169
Etiology	169
Clinical features	175
Types of schizophrenia	175
Diagnosis of schizophrenia	176
Schizophrenia in ICD 11	177
Scales used in schizophrenia	178
Treatment of schizophrenia	178
Course and outcome of schizophrenia	180
Negative symptom schizophrenia	182
Smoking and schizophrenia	183
Landmark studies in schizophrenia	184
Treatment resistant schizophrenia	185
Schizoaffective disorder	187
Schizotypal disorder	188
Acute and transient psychotic disorder	189
Delusional disorder	190
Schizophreniform disorder	191
References	191

20. Catatonia	193
Introduction	193
Types	193
Clinical features and diagnosis	193
Scales and management	194
Periodic catatonia	195
Lethal catatonia	195
Autistic catatonia	195
Other causes of catatonia	195
Conditions related to catatonia	196
References	196
21. Mood Disorders	197
Introduction	197
Etiology of mood disorders	197
Mania and BPAD	201
Cyclothymia	206
Depression	206
Dysthymia	214
Landmark studies in mood disorders	214
References	215
22. Anxiety Disorders	217
Introduction	217
Generalized anxiety disorder	218
Panic disorder	219
Phobias	221
Separation anxiety disorder	222
Selective mutism	222
References	222
23. Obsessive Compulsive Disorders	223
Introduction	223
Obsessive Compulsive Disorder	223
Body Dysmorphic Disorder	226
Olfactory Reference Disorder	226
Hypochondriasis	227
Hoarding Disorder	227
Body focused repetitive behaviour disorders	228
References	228
24. Stress Associated Disorders	229
Introduction	229
Acute stress reaction	229
Post-Traumatic Stress Disorder	229
Prolonged Grief Disorder	230
Adjustment Disorder	231
Reactive Adjustment Disorder	231
Disinhibited Social Engagement Disorder	231
References	231

25. Dissociative Disorders	233
Introduction	233
Dissociative Neurological Symptom Disorder	233
Dissociative Amnesia	235
Trance Disorder	235
Possession Trance Disorder	235
Dissociative Identity Disorder	236
Ganser's Syndrome	236
References	236
26. Eating, Elimination and Body Experience Disorders	237
Introduction	237
Anorexia Nervosa	237
Bulimia Nervosa	239
Binge Eating Disorder	240
Avoidant Restrictive Food Intake Disorder	240
Pica	240
Rumination Regurgitation Disorder	241
Elimination Disorders	241
Body Experience Disorders	241
References	242
27. Addictions	243
Introduction	243
Terminology	243
Basic concepts	244
Alcohol	245
Nicotine	253
Cannabis	253
Opioids	255
Hallucinogens	255
Stimulants	256
Gambling and Gaming Disorders	257
References	258
28. Other Disorders	259
Introduction	259
Impulse Control Disorders	259
Dissocial Disorders	260
Personality Disorders	260
Factitious disorders	264
Neurocognitive disorders	265
Sleep disorders	266
Sexual disorders	269
References	273
29. Principles of Psychopharmacology	275
Introduction	275
Historical overview	275
Pharmacokinetics	276

Pharmacodynamics	278
Enzyme induction and inhibition	279
Clinical trials	280
Drugs in special population.....	280
References.....	280
30. Antipsychotics	281
Introduction	281
Typical antipsychotics	281
Atypical antipsychotics	282
Clozapine	283
Depot antipsychotics.....	284
General mechanism of action of antipsychotics	284
General adverse effects of antipsychotics	285
Others	289
References.....	289
31. Other Psychotropics	291
Introduction	291
Antidepressants.....	291
Mood stabilizers	295
Anxiolytics.....	297
Other drugs.....	298
References.....	299
32. Brain Stimulation Techniques.....	301
Introduction	301
Electro Convulsive Therapy	301
Vagal Nerve Stimulation	302
Deep Brain Stimulation	303
TMS	303
TDCS	304
Psychosurgery	304
References.....	304

SECTION 5: SPECIALITY PSYCHIATRY

33. Child and Adolescent Psychiatry	307
Introduction	307
Intellectual disability	307
Syndromic causes of ID	312
Developmental speech or language disorders.....	314
Autism spectrum disorder	315
Developmental learning disorder.....	317
Attention deficit hyperactivity disorder	318
Motor coordination and stereotyped movement disorder	320
Disruptive behaviour or dissocial disorders.....	320
Elimination disorders.....	322
Other childhood onset disorders.....	324
References.....	328

34. Women and Mental Health	329
Introduction	329
Gender differences in psychiatric disorders	329
Psychiatric disorders specific to women	330
Teratogens	332
References	334
35. Old Age Psychiatry	335
Introduction	335
Geriatric depression	335
Post stroke depression	336
Vascular depression	337
Old age psychosis	337
Charles Bonnet syndrome	337
Diogenes syndrome	338
Transient global amnesia	338
Elder abuse	338
Breaking bad news	338
Palliative care	339
Euthanasia	339
Pharmacokinetics in elderly	340
Pharmacodynamics in elderly	340
References	340
36. Emergency Psychiatry	341
Introduction	341
Suicide	341
Acute agitation	344
Disaster management	345
References	347
37. Forensic Psychiatry	349
Introduction	349
Consent	349
Confidentiality	350
Criminal responsibility	351
Civil responsibilities	353
Suicide and euthanasia	353
Homosexuality	354
Certification in psychiatry	354
Psychiatrist in the court	355
Salient sections of IPC	355
Narcoanalysis	355
Research and law	356
Mental health legislations in India	356
References	359
38. Community Psychiatry	361
Introduction	361
Timeline	361
NMHP	362

DMHP	362
Day care and halfway homes	363
References	363
39. Psychotherapy	365
Introduction	365
Psychoanalysis	365
Brief psychodynamic psychotherapy	366
Group therapy	367
Psychodrama	368
Family therapy	368
Couple therapy	369
Dialectical behaviour therapy	370
Biofeedback	370
Behavior therapy	371
Cognitive behavior therapy	372
Interpersonal therapy	374
Motivational enhancement therapy	374
Behavioural activation	375
Cognitive analytical therapy	375
Integrated psychotherapy	375
Other therapies	376
Therapeutic alliance	377
References	377
40. Others	379
Introduction	379
Rehabilitation	379
Migration and mental illness	381
Global burden of mental illness	382
Alternative medicine	383
Laboratory investigations	383
References	385

SECTION 6: NEUROPSYCHIATRY

41. Dementias	389
Introduction	389
Overview	389
Alzheimer's disease	394
Vascular dementia	397
Parkinson's disease dementia	398
Huntington's Disease	400
Frontotemporal Dementias	400
Creutzfeldt Jakob Disease	401
Wilson's Disease	402
Normal Pressure Hydrocephalus	402

Intra Cranial Bleeds as a cause of Dementia	403
Other Causes.....	404
References.....	404
42. Epilepsy	405
Introduction	405
Clinical Description.....	405
Classification.....	407
Neuropsychiatric Aspects.....	409
Status Epilepticus	411
Epilepsy Syndromes.....	411
Anatomically Localized Epilepsies.....	412
Pseudo Seizure.....	412
References.....	413
43. Stroke	415
Introduction	415
Neuropsychiatric Aspects.....	415
References.....	417
44. Nervous System Infections	419
Introduction	419
HIV - AIDS.....	419
Meningitis	422
Encephalitis.....	423
Neuro Syphilis.....	423
Herpes Zoster.....	424
Herpes Simplex	424
References.....	425
45. Delirium	427
Introduction	427
Causes	427
Clinical Features	428
Prevention	429
Management	429
Delirium and Dementia	431
Encephalopathy	431
Hypoactive Delirium	432
References	432
46. Traumatic Brain Injury	433
Introduction	433
Classification.....	433
Neuro Behavioural Sequel of TBI	434
References.....	437
47. Headache	439
Introduction	439
Classification of Headache	439

Migraine	439
Tension Type Headache	441
Cluster Headache	442
Others	442
References	443
48. Psychosomatic Medicine	445
Introduction	445
Stress and Body	445
GIT system	446
CVS	446
Respiratory System	446
Endocrine System	446
Skin	447
Musculoskeletal System	447
General Management	447
References	448
49. Neurological Investigations	449
Introduction	449
Neuroimaging	449
EEG	452
Evoked Potential	454
References	455
50. Others	457
Introduction	457
Autoimmune Encephalitis	457
Nutritional Deficiencies	458
Aphasia	461
Apraxia	462
Bell 's Palsy	463
Trigeminal Neuralgia	463
Cerebral Venous Sinus Thrombosis	463
Kindling	464
Gait Disorders	464
Other Movement Disorders	465
Multiple Sclerosis	466
Neuromuscular Diseases	467
Neurocutaneous Syndrome	467
Plantar Reflex	468
Organic Amnestic Syndromes	468
Thyroid Disorders	469
Diabetes, TB and Malaria	470
Biomarkers	472
Neurological Soft Signs	472
Primitive Reflexes	473
References	474
<i>Index</i>	475

FOREWORD

PG notes in PSYCHIATRY has been innovative in style and valuable in contents. It has established itself as a popular book among psychiatry residents across India, with in just a few years of launch. The success and wide acceptance of this book is evident from its positive reviews in social media, online sales platforms, and more importantly by journals like KJP.

I am glad to know that Dr. Cijo Alex has thoroughly updated and improvised the same in its second edition – PGNIP2. This book will continue to act as a single stop solution for PG psychiatry examinations.

I wish him all the best for the success of PGNIP2.

– **Prof. Roy Abraham Kallivayalil**

President, World Association of Social Psychiatry

Secretary General, World Psychiatric Association

PREFACE TO THE FIRST EDITION

PG notes in Psychiatry is best described as a compilation of extracts from various textbook chapters, lecture notes, review articles and expert opinions. Care has been taken to cover most of the relevant topics in Psychiatry, and also to present it in a clear and crisp format. Through the six sections inside the book, I have tried to include almost all the topics as required for majority of PG exams, from basic medical sciences to specialty psychiatry. Simple to reproduce pencil diagrams and tables have been used in plenty, to facilitate easy understanding. Thus, it can act as a single stop solution for a PG resident in Psychiatry.

The entire idea started to evolve while I was in posted in NIMHANS for training in child and adolescent Psychiatry. Like most of the other external PG's posted there, me and my colleague Dr. Sanu also got a copy of the popular NIMHANS notes, written by former PG's. Despite being elaborate and comprehensive, they had a serious flaw of being handwritten and photocopied, thus making it difficult to read. Later, during my final exam period, I realized the need and potential for a comprehensive book, which can help save time, especially in the final year where you have lots of things to cover.

I would like to express my thanks to all my colleagues and faculty in SMVMCH, Pondicherry, among which Dr. Venkatarangan, Dr. Sanu, Dr. Pradeep and Dr. Hari needs special mention. During my PG training, Dr. Venkatarangan always considered me a future colleague than a student. He also taught me the art of clinical psychiatry and history taking, which no text book has on offer. I am also thankful to Prof. Roy Abraham Kallivayalil, Secretary General of World Psychiatric Association, for consenting to give an inspiring foreword. Finally, I am thankful to you for purchasing this book and I sincerely hope that this would be a worth read. As a maiden attempt, I apologize for any mistakes or omissions that might have occurred. Your feedback regarding the same would be highly appreciated. I wish you a happy reading and all the best.

Warm regards,

– **Dr. Cijo Alex**

Olickal, Pala – 686 578, Kerala

cijoalex@pgnotesinpsychiatry.org

www.pgnotesinpsychiatry.org

PREFACE

Let me begin the preface to this second edition with a heartfelt thanks to all psychiatry residents and faculty from across India, for making the PG notes in PSYCHIATRY a success. Without your help and support, this second edition – PGNIP2 would not have been possible.

Similar to the first edition, PGNIP2 remains crisp, comprehensive and exam oriented. It is best described as a compilation of information from various textbooks, lecture notes, guidelines and online sources. All relevant references has been cited to facilitate further, in depth reading. Just like the first edition, the sole aim of PGNIP2 is to help you pass PG psychiatry examination.

Through the six sections and fifty chapters, topics ranging from anatomy to neurology has been dealt in reasonable detail. All speciality chapters has been edited by specialists from respective fields. A number of diagrams and tables has been added or revised for the ease of reproduction. The entire matter is up to date in accordance with ICD 11, DSM 5, MHA 2017 and Maudsley guidelines 2018.

I wish to express my heartfelt gratitude to all my friends and faculty in Pondicherry and Kerala among which Prof. R. Kumar, Drs. Venkatarangan, Sanu, Jaico and Karuna needs special mention. I would also like to thank Prof. Roy Abraham Kallivayalil for an inspiring foreword.

Further I wish to thank Drs. Abel K Samuel, Anly Antony, Jean Fredrick, Joban John, Nandita Maini and Shinto Devassy for their willingness to edit speciality chapters.

Wish you all the best!

– **Dr. Cijo Alex**
cijoalex@pgnip2.com

SECTION 1

PRELUDE

HISTORY OF PSYCHIATRY

INTRODUCTION

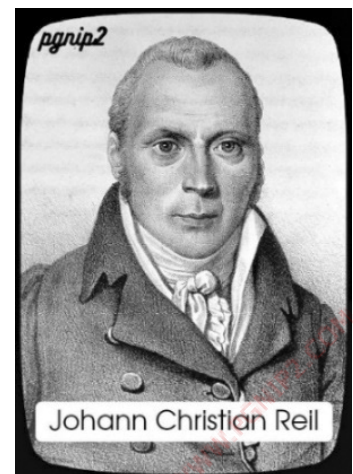
Psychiatry literally means *medical treatment of the soul*. The word *psyche* has its origin from the ancient Greek, where it means soul or butterfly. Psi or Ψ is the twenty third letter of the Greek alphabet, and is often used as a symbol of psychiatry. Psychiatrist is a medical doctor or physician who specializes in the field of psychiatry. It was the German physician Johann Christian Reil who coined the term psychiatry in 1808. He is considered the father of psychiatry. He was also the first to describe the white fibre tract now referred to as the *arcuate fasciculus*.

William Griesinger was a neurologist from Germany who believed that all mental disorders are brain diseases. He is considered the father of neuropsychiatry and his concepts are becoming increasingly relevant with advances in the localization of brain functions and with the biological underpinnings of psychiatric disorders getting fast identified.

Psychiatrists differ from other mental health professionals and general physicians, as they are required to have an understanding of both social and biological sciences in relation to human behaviour. However, since the late 20th century psychiatry is becoming more biological and less different to other branches of medicine. This can be considered a paradigm shift from the strong psychological oriented views like psychoanalysis and even more radical views like antipsychiatry. This change of views are evident in the use of terminology in latest versions of DSM by APA and ICD by WHO. However, there is no denying that various psychological factors play an important role in the causation of psychiatric disorders especially as a precipitant in an already biologically vulnerable individual. Addiction psychiatry, child psychiatry, geriatric psychiatry and forensic psychiatry are some branches of general psychiatry which look into various specialized areas within psychiatry.

History of medicine is a fascinating subject as it is a saga of man's struggle against disease. As correctly said, history is a screen through which the past enlightens the present, and the present brightens the future. The time line of psychiatry is best described after classifying into distinct time periods or ages, for the ease of understanding. It may be surprising to learn that the oldest text on psychiatry is found in the Ayurveda work, *Charaka Samhita*.

The earliest predecessor of mental hospitals is the sanctuary of Asclepios at Epidaurus, Greece. Asclepius is the Greek God of healing who was born

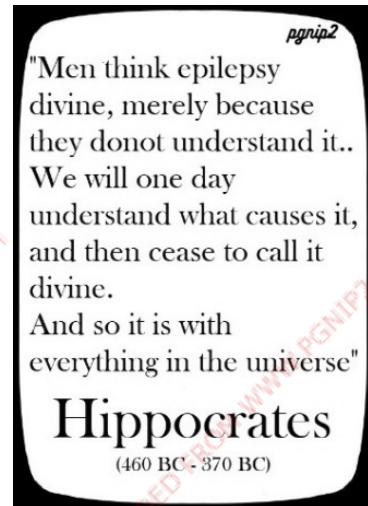


in Epidaurus. The Asklepeion is an example of the typical health centre of the Ancient World. The vast site with its temples and hospital buildings devoted to its healing gods, provides valuable insight into the healing cults of Greek and Roman times. Its principal monuments, particularly the temple of Asclepius, the Tholos and the Theatre are considered one of the purest masterpieces of Greek architecture. The sanctuary also finds a place in the world heritage sites list by UNESCO. In the paragraph below we will see the history of psychiatry after dividing it into distinct ages or era. In addition, a separate portion has been added about the evolution of psychiatry as a medical specialty in India.

AGE OF RATIONALISM

The period between 500 BC and 500 AD is considered the age of rationalism or the golden age in medicine. Plato, the famous philosopher from classical Greece along with his teacher Socrates, and student Aristotle laid the foundations of western philosophy. In his work *The Republic*, Plato divided human mind into three parts of *appetite*, *impulse* and *reason*. Further he described four kinds of madness as *prophetic*, *teletic*, *poetic* and *erotic*. Aristotle later described various emotions like *joy* and *anger* in his work *De Anima*.

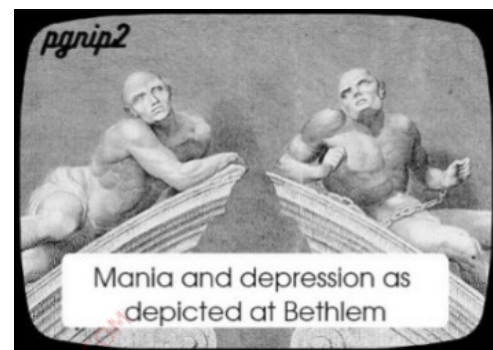
Hippocrates, who is considered the father of medicine was among the first to describe mental illnesses. He is credited as being the first person to believe that diseases were caused naturally and not because of Gods or supernatural powers. He described four body humors and believed that it is their imbalance that results in illness. According to him, it was the excess of black bile that caused melancholia, while excess of yellow bile resulted in mania. Hippocrates rejected the theory of demonic invasions and suggested brain pathology as the cause of mental illness. *Phrenitis* was an ancient Greek term used to denote modern day clinical condition similar to delirium. Galen in Rome, and Charaka and Susruta in India are also among the pioneers who proposed organic cause for mental disorders.



THE DARK AGES

Fall of Roman Empire was followed by a decline in scientific interest and medical research. Religion took dominance over science and this age can be described as a period of intellectual stagnation. Mentally ill patients were often treated cruelly. *Malleus Maleficarum* or *The witch hammer* was an influential book written by German clergy men which proposed torturing and killing of the people with mental illness.

The dark ages also witnessed a rise in the number of mental asylums of which most of them resorted to cruel and inhumane treatment. Baghdad mental asylum is the first mental asylum in world which was setup in 705 AD. This was followed by opening of psychiatry



hospitals at Fes and Cairo. Bethlem hospital, London was the first major, *modern* psychiatric hospital which was opened in 1247 AD. Most of these early age hospitals were merely custodial centres with no emphasis on cure.

AGE OF ENLIGHTENMENT

The age of enlightenment which began roughly by the early eighteenth century is closely associated with the scientific revolution. Eighteenth century is often called the century of philosophy and is widely known for its attitude of *Sapere Aude*, which means *dare to know* in Latin. This age of enlightenment is noted for the strong stance against absolute monarchy and fixed dogmas of the Catholic Church. Science, evidence and logical thought assumed importance. Johann Weyer was a Dutch physician noted for his stands against demonic theories of psychiatric illnesses. He also gave descriptions of various psychiatric disorders and is considered father of modern psychiatry by some historians.

William Cullen was the first to use the term neurosis, which he thought is as a result of parts of brain being in excitement and collapse. Philippe Pinel was the pioneer in unchaining and advocating humane treatment to the mentally ill. He classified insanity into four categories of mania, melancholia, idiocy and dementia. Esquirol was a student of Pinel and he has contributed a lot to descriptive psychopathology. He is credited with the coining and description of the terms *illusion* and *hallucination*. Esquirol further classified mental illnesses into *monomania* and *general delirium*.

Later, it was the German physician Johann Christian Reil who coined the term psychiatry in 1808. He is generally considered the father of psychiatry. He also started the first journal in psychiatry. And as already described, he was also the first to describe the white fiber tract now referred to as the *arcuate fasciculus*.

Benedict Morel was the French psychiatrist who coined the term *dementia precece* to denote illness similar to modern day schizophrenia. Later, Emil Kraepelin and Eugene Bleuer elaborated on the Morels idea of *dementia precece*. Emil Kraepelin divided mental disorders into *dementia precox* and *manic depressive illness*. It was Eugene Bleuer who coined the term schizophrenia. He also described the primary and secondary symptoms of schizophrenia. Jaspers, Schneider and Mayor Gross were prominent German psychiatrists who contributed to the study of psychopathology.

Wilhelm Griesinger, Henry Maudsley and Paul Broca were prominent neuro psychiatrists of their times, who strongly believed in the organic aetiology of psychiatric disorders. Alois Alzhiemer was the German neuropathologist to first describe a case of progressive dementia, which was later named after him. Pierre Janet coined the term *dissociation* while it was George Beard who coined the term *neurasthenia*.

Anton Mesmer was an Austrian physician who believed that illnesses resulted from imbalance between magnetic fields and he developed the concept of *animal magnetism* or *mesmerism*. Later, it was James Braid a Scottish surgeon who worked further on *animal magnetism* and developed *hypnotism*. This was developed and used as a treatment for neurotic illnesses.

Sigmund Freud was a neurologist from Austria who is well known for his psychoanalytic theories. Freud's psychoanalytical theories were so popular during this time that many physicians and biological proponents like Richard Asher choose to stay away from psychiatry, than confronting him. Asher is noted

for his descriptions on myxoedema madness and Munchausen syndrome. Many of Freud's followers like Alfred Adler and Carl Jung are called Neo Freudians and they improvised psychoanalytic theories in various ways.

Electroconvulsive therapy or ECT was introduced by Cerletti and Bini, two Italian psychiatrists. It was Moniz and Lima who propagated psychosurgery as a treatment option in psychiatry. Cerletti and Bini were nominated for the Nobel Prize, while Moniz was awarded with the same.

Twentieth century witnessed the advent and strengthening of psychopharmacology. Delay and Deniker is noted for the introduction of chlorpromazine which was originally synthesised by Charpentier. Lithium was introduced by Cade in the treatment of mania. Imipramine was the first TCA drug and was introduced by Kuhn. Haloperidol was discovered by Paul Janssen, a Belgian doctor and founder of Janssen pharmaceuticals.

Chlordiazepoxide was the first benzodiazepine drug to be marketed. Zimeldine, the first SSRI drug to be marketed was recalled shortly after its introduction, following reports of associated Guillain Barre Syndrome. Clozapine was popularized by Kane in clinical practice while it was Lambert who introduced valproate in psychiatric treatment.

NOBEL LAUREATES

The Nobel Prize formed after the will of Alfred Nobel, is considered the most prestigious award in various fields including science and medicine. There has been multiple instances in which the Nobel Prize in physiology or medicine has been awarded to people related to psychiatry.

Ivan Pavlov, the Russian physiologist was awarded Nobel Prize for his work on physiology of digestion and classical conditioning. Egas Moniz was awarded the same for his discovery of frontal leucotomy. Konrad Lorenz, an Austrian zoologist noted for his studies on ethology and imprinting was awarded Nobel Prize in 1973. Eric Kandell, Arvid Carlson and Paul Greenard shared the Nobel Prize of 2000 for their discoveries concerning signal transduction in the nervous system. Arvid Carlson is noted for his discovery of dopamine, the neurotransmitter of pleasure. In addition, various other prominent figures in psychiatry like Cerletti and Bini were nominated for the Nobel Prize.

THE INDIAN SCENARIO

Ancient Ayurveda manuscripts like *Charaka Samhita* and *Sushruta Samhita* do mention about mental disorders. In fact, the oldest text on psychiatry is found in *Charaka Samhita*. It states that a person suffering from mental illness should be referred to *Manasaroga Bhesaja Vedi*, which is probably the first term used to describe a psychiatrist. The ancient Indian literature *Atharva Veda* considers mental illnesses as resulting from divine curses. It also includes a vivid description of modern day schizophrenia. Ayurveda considers mind or *Manas* as one among the three integral parts of human existence, the other two being the *body* and the *spirit*. Ayurveda also describes *Yuktivyapashraya* and *Satvavajaya*, similar to modern day biological therapies and psychotherapies. *Bhagavat Geetha* is often considered a classical example of crisis intervention and psychotherapy.

The traditional medical system of *Unani* describes seven types of mental disorders. Siddha system of traditional medicine also describes mental illnesses. King Asoka has established hospitals to cater mentally ill patients and as per the *Ashoka Samhita*, those hospitals had separate areas for admission, treatment etc. The first formal psychiatric hospital in India was started in Bombay by 1745. This was followed by similar institutions in Calcutta and Madras. During this period, excited patients were treated with opium, given hot baths and sometimes leeches were applied to suck their blood. The Central Institute of Psychiatry, Ranchi was initially started as a European Hospital in 1918 and by 1922, it got permission from the University of London to start a diploma course in psychological medicine.

Girindrasekhar Bose was a prominent psychoanalyst and the founder of Indian Psychoanalytical society. He used to be in regular communication with Sigmund Freud regarding psychoanalysis and related concepts. On the recommendation of Bhore committee, the All India Institute of Mental Health was setup in 1954 which later became the NIMHANS. Wig was a prominent psychiatrist who contributed a lot to the concept of culture bound syndromes and the use of Yoga in psychiatry.

The Indian Psychiatric Society was founded on 7th January 1947 in New Delhi at a meeting convened by Major R B Davis during the Indian Science Congress. There were two earlier attempts to form association of psychiatrists in India. The Indian Association of Mental Hygiene was formed in 1929 at the initiative of Colonel Berkley Hill in 1929 which ceased to function after a few years and the Indian division of the Royal Medico Psychological Association formed in 1939 at the initiative of Dr. Banarasi Das. The Indian division of RMPA was dissolved after the formation of Indian Psychiatric Society. The annual conferences of the Society are being held regularly every year except in the year 1963 due to national emergency. From the humble beginning of 15 members the Society has grown into one of the biggest psychiatric societies of the world with a membership of more than 5500 members.

Erwadi tragedy occurred in 2001 in the Erwadi village of Tamil Nadu, where 28 chained inmates at a faith based healing home were burnt to death. After the incident, many illegal, faith based healing centres were closed down. This incident further exposed the unmet need of legislations regarding mental healthcare in India. More details on Erwadi tragedy and various mental health legislations of India can be found in the chapter on forensic psychiatry, under section 5.

ANTIPSYCHIATRY

By all chances, psychiatry is the only medical specialty with the history of an anti-movement. Anti-psychiatry was a movement against the concept of psychiatry and psychiatric illnesses. This movement probably has its ideological roots in the dissatisfaction towards the inhuman and abusive treatments given in the ancient psychiatric asylums. This pre scientific era, inhuman psychiatric treatments can be considered the



original sin of psychiatry as a profession. Although irritating and demotivating at times antipsychiatry movement can be utilized to help us remain honest and rigorous about what we do, at least from a rationalizing point of view.

The nineteen sixties was a time of a radical thought and the same witnessed many movements like gay liberation, free love and hippy culture. Psychiatry profession also came under scrutiny during this period especially the compulsory electric shock therapy and abusive treatments, which later become generalized over the entire profession.

In fact, some of the arguments against psychiatry appeared so convincing, at least as per the level of information available that time. This was because conditions like schizophrenia neither had a demonstrable physical change in the brain nor it could be detected by any physical test. Hence, many anti psychiatry activists disagreed to consider them a real illness. The antipsychiatry movement was also appealing to some religious institutions who considered mental illness as a moral issue than a medical illness.

Thomas Szasz, RD Laing, Michael Foucault, Franco Basaglia and David Cooper were prominent anti psychiatrists and the term anti-psychiatry was coined by David Cooper. They all claimed that psychiatrists are doing harm to the patients rather than helping them out. They considered mental illness a myth and proposed that mind is not a bodily organ and hence cannot be treated. They proposed that psychiatry is a pseudoscience that pathologizes normal variations of human behaviours, thoughts or emotions. However, the anti-psychiatry movement could not stand the test of time though it still exists as a small vocal coalition of scientologists, and also during the University general viva!

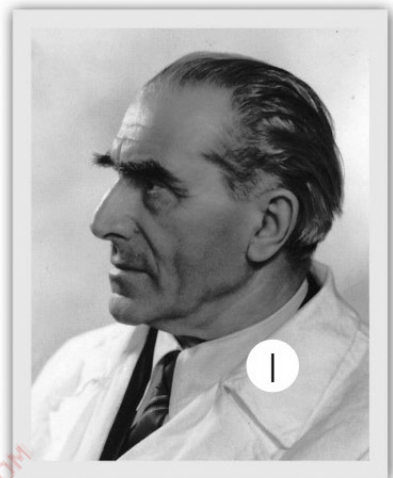
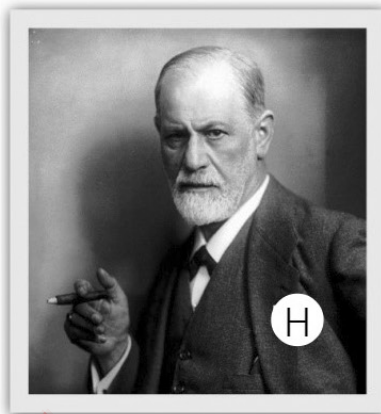
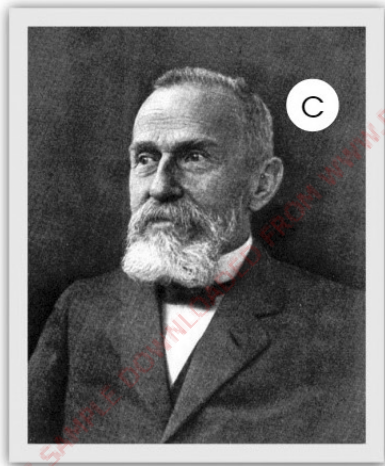
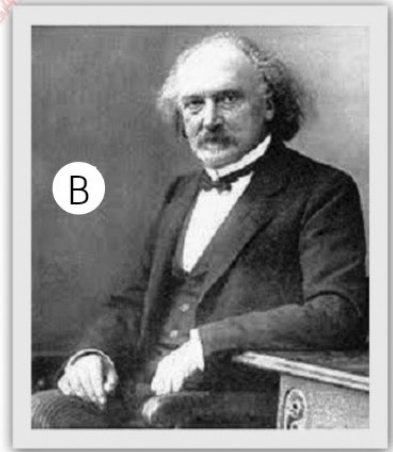
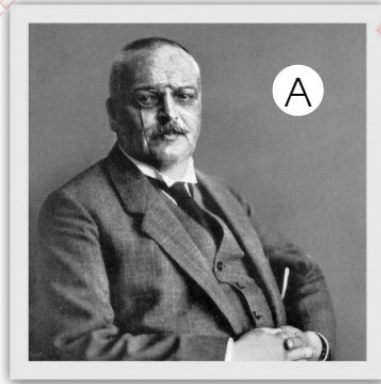
RD Laing is famous for describing schizophrenia as *a sane reaction to an insane world*. Laing's idea was that the person with schizophrenia was simply the scapegoat of a dysfunctional family, and was paradoxically often the sanest person in the family group. Thomas Szasz is the author of *the myth of mental illness*, and it was Michael Foucault who authored *madness and civilization*. Michel Foucault propagated a paradigm shift that regarded delusions not as madness or illness, but as a behavioural variant or an anomaly of judgment. Rosenhan experiments or thud experiment, as originally conducted by a psychologist Rosenhan, is also considered a part of antipsychiatry movement. This experiment included actors faking mental illness, and getting admitted in psychiatric hospitals.

REFERENCES

1. Naskar S. HISTORY OF PSYCHIATRY [Internet]. Slideshare.net. 2015 [cited 31 October 2018]. Available from: <https://www.slideshare.net/tutucnmc/history-of-psychiatry>
2. Nizamie H, Goyal N. History of psychiatry in India. Indian Journal of Psychiatry. 2010;52(7):7.
3. Ernst W. Colonial Psychiatry, Magic and Religion. The Case of Mesmerism in British India. History of Psychiatry. 2004;15(1):57-71.

4. Puri B, Hall A, Ho R. Revision notes in psychiatry. 3rd ed. CRC Press; 2013.
5. History of psychiatry [Internet]. En.wikipedia.org. 2018 [cited 31 October 2018]. Available from: https://en.wikipedia.org/wiki/History_of_psychiatry
6. Sanctuary of Asklepios at Epidaurus [Internet]. <https://whc.unesco.org>. 2019 [cited 14 January 2019]. Available from: <https://whc.unesco.org>
7. About Indian Psychiatric Society - IPS [Internet]. [Indianpsychiatricsociety.org](http://www.indianpsychiatricsociety.org). 2019 [cited 6 April 2019]. Available from: <http://www.indianpsychiatricsociety.org/about.php>

WHO IS WHO?



This collage shows certain important figures in Psychiatry. A brief description about each of them is given below.

WHO IS WHO?

- A. Alois Alzheimer (1864 – 1915) was a psychiatrist and neuro pathologist who first described the modern day Alzheimer's disease. He was a colleague of Emil Kraepelin.
- B. Benedict Morel (1809 – 1873) was a French psychiatrist who coined the term *démence précoce*. Later Emil Kraepelin and Eugene Bleuler elaborated on the Morels idea of *démence précoce*.
- C. Emil Kraepelin (1856 – 1926) was a German psychiatrist who believed in the biological and genetic causation of mental illness, contrary to the then prominent psychological theories. He is well known for the so called *Kraepelinian dichotomy* classification of mental disorders, in which he divided mental illnesses into two broad categories of *manic depression* and *dementia praecox*.
- D. Eugen Bleuler (1857 – 1939) was a Swiss psychiatrist who coined the modern day term of schizophrenia to replace *dementia praecox*. He also coined terms like autism and schizoid.
- E. Johann Christian Reil (1759 – 1813) was a German physician and psychiatrist who coined the term Psychiatry. He is considered the father of Psychiatry. He was also a romantic writer in German. Reil was the first one to describe the white fiber tract now called the arcuate fasciculus.
- F. Karl Jaspers (1883 – 1969) was a German psychiatrist and philosopher who contributed a lot to psychopathology. *General Psychopathology* by Jaspers is considered a classic work in Psychiatry.
- G. Philippe Pinel (1745 – 1826) was a French physician who is well known for the unchaining of psychiatric patients. He was among the prominent psychiatrists to advocate moral treatment for the mentally ill. Some consider him as the father of modern psychiatry.
- H. Sigmund Freud (1856 – 1939) was an Austrian neurologist who is considered the father of psychoanalysis. Psychoanalysis is a prominent school of psychology. His concepts still remains influential in psychotherapy, humanities and some areas of psychiatry.
- I. Ugo Cerletti (1877 - 1963) was an Italian neurologist and psychiatrist, who discovered electro convulsive therapy.

