Neuropsychiatry in Anglophone Countries of West Africa

Oluyomi Esan
Consultant psychiatrist
University College Hospital, Ibadan Nigeria
Outline

• Historical perspectives.
• Mental health conditions.
• Mental Health Financing.
• Mental health services available for Neuropsychiatry
• Human resources for Mental Health

• Teaching of psychiatry

• Research

• Conclusion

• Questions
Map of Africa showing west Africa
The 16 countries of West Africa
• Most countries in the region have English or French as their official language.

• Islam and Christianity are the major religions in the region.

• The region covers an area of 5 million square km approximately 20% of Africa.
• Population is approximately 365 million.

• Nigeria (population 200 million) constitutes over half of the population of the region.

• Cape Verde is the least populated country in the region with a population of 0.5 Million.
Historical perspectives: Neuropsychiatric research

- Dr Geoffrey Tooth, Medical officer ministry of health

- "Studies in mental illness in the Gold Coast".

- His Majesty's Stationery Office HMSO (1950)

- The mental effects of trypanosomiasis (African sleeping sickness).

- Discussed the similarities between trypanosomiasis and schizophrenia.
Thomas Adeoye Lambo (1923-2004)
• Distinguished psychiatrist from Nigeria.

• Trained in psychiatry at the Maudsley Hospital in London.

• Returned to Nigeria in 1953 to work at the Neuropsychiatric Hospital Aro, Nigeria.
NEUROPSYCHIATRIC OBSERVATIONS IN THE WESTERN REGION OF NIGERIA

BY

T. ADEOYE LAMBO, M.D., D.P.M.
Medical Superintendent, Aro Hospital for Nervous and Mental Diseases, Abeokuta, Nigeria

It is proposed in this article to discuss in outline the various neuropsychiatric problems studied in our psychiatric day hospital and to inquire whether, and in what sense, a neuropsychiatric day hospital is of value as an instrument of investigation and therapy in this particular social environment.

It is important to define the attitudes of the African to sickness in general and to mental illness in particular. There is also a great need in our entire management...
and these schoolboy patients—we have found that they benefit considerably from a day hospital of this nature.

**Neurological Findings**

Our clinical experience in the field of neurology is confined to convulsive disorders, Parkinson's disease with personality changes, cerebral lues, psychiatric aspects of cerebrovascular disorders, neuropsychiatric syndromes associated with avitaminosis and malnutrition, and post-traumatic conditions (head injuries), usually with some degree of personality alteration but with or without residual neurological signs. Our observations on this important subject are grossly inadequate, as we are interested only in neurological patients with psychiatric changes or borderland cases belonging to both sciences.

**Epilepsies**

We have seen more epilepsies at this day hospital than any other neurological or psychiatric disorder except schizophrenia. Clinically, we have observed all forms of convulsive
SYMPTOMATIC DYSTONIA AS A COMPLICATION OF ENCEPHALOPATHY IN AFRICANS

BY

T. ADEOYE LAMBO, M.D., D.P.M.

From Aro Hospital for Nervous and Mental Diseases, Abeokuta, Nigeria, and the Psychiatric Clinic, University College Hospital, Ibadan, Nigeria

This paper describes five cases of symptomatic dystonia complicating encephalopathy with mental defect in indigenous Africans. In the original description of his case Thomalla (1918) used the general term "dystonia lenticularis" to include double athetosis, pseudosclerosis (Westphal-Strümpell), Wilson's disease, and torsion spasm. Under this general term I present two cases of torsion spasm, two with double athetosis, and one with Westphal's pseudosclerotic clinical features, all showing mental defect and a clinical mixture of related syndromes. In these patients dystonia, their predominant feature, was symptomatic of a definite illness such as encephalitis lethargica or other affection of the basal ganglia; unlike Ziehen-Oppenheim disease, dystonia musculorum deformans, which is of unknown aetiology.

in the last case, but the clinical features were similar to those of myoclonic encephalopathy. The first case is typical and was characterized by bizarre and grotesque contortions of the trunk and limbs, a marked degree of motor agitation, and alternation of hypotonicity and hypertonicity.

Torsion Spasm

Case 1

A girl aged 5 came under observation in April, 1956. She was the youngest of six children, three of whom died in infancy. The father was aged 39 and the mother 29 at the time the patient was born. The family history revealed no familial or hereditary nervous or mental disease. The grandparents are alive and well.

The patient was normal at birth. In 1954 she had a febrile illness which was followed by a localized rash on the
Neuropsychiatric disorders

A review of cases of patients seen at the Department of Psychiatry, University College Hospital, Ibadan over a 5 year period (January 2006 to December 2010).

A total of 3196 patients were seen during this period. Of this 11.4% (365) had Neuropsychiatric disorders
University College Hospital Nigeria
<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Organic depressive disorder</td>
<td>2.5</td>
</tr>
<tr>
<td>Sleep disorders</td>
<td>1.9</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>1.6</td>
</tr>
<tr>
<td>Substance induced Psychosis</td>
<td>0.8</td>
</tr>
<tr>
<td>Encephalitis</td>
<td>0.5</td>
</tr>
<tr>
<td>Amnestic Syndrome</td>
<td>0.5</td>
</tr>
<tr>
<td>Frontal Lobe Syndrome</td>
<td>0.3</td>
</tr>
<tr>
<td>Cerebro Vascular Accident</td>
<td>0.3</td>
</tr>
<tr>
<td>Craniopharyngioma</td>
<td>0.3</td>
</tr>
<tr>
<td>Conversion disorder</td>
<td>0.3</td>
</tr>
<tr>
<td>Cannabis Intoxication</td>
<td>0.3</td>
</tr>
<tr>
<td>Alcohol Induced Mood Disorder</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Neuropsychiatric conditions commonly seen.

- Head Injury
- Cerebral tumors
- Intracranial infections
- AIDS
- Encephalitis meningitis
- Cerebral abscess
- Cerebrovascular disorders.
- Hypertensive

- Subdural haematoma
- Endocrine Disease and Metabolic disorders
- Thyroid and parathyroid disorders
- Adrenal disorders
- Pituitary disorders
- Movement disorders
- Encephalopathies
Legislation Protecting the Rights of People with Mental Health
Legislation Protecting the Rights of People with Mental Health

• Countries like Ghana have specific legislation protecting the rights of people with mental illness.

• No specific mental health legislation protecting the rights of the mentally ill is in operation in many countries in the region.
• “Lunacy Act” enacted in the early 20th century still operate in many countries.

• Do not account for the rights of service users as would be required in modern times.

• Human rights for the mentally ill are only based on the rights provided for by country constitution and conventions or treaties signed by the country on human rights issues.
Mental Health Financing
• Generally the Mental health budget is less than 1% of the total health budget.

• Funding is mainly from subvention from the central government.

• Generally there is no specific budget for mental health at any level of government.
• The total mental health budget ranges from 0.54% to 1.3% of the total health budget.

• In countries such as the Gambia, financing is mainly from foreign donation. Government contribution is minimal.

• Main method of paying for treatment is OOP. Public and Private insurance has only a limited coverage.
Korle bu Teaching Hospital, Ghana.
Table Showing distribution of some mental health facilities in some West African countries.

<table>
<thead>
<tr>
<th></th>
<th>LIBERIA</th>
<th>GAMBIA</th>
<th>S/LEONE</th>
<th>GHANA</th>
<th>NIGERIA</th>
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</thead>
<tbody>
<tr>
<td>Population</td>
<td>4,200,000</td>
<td>2,000,000</td>
<td>6,000,000</td>
<td>26,000,000</td>
<td>200,000,000</td>
</tr>
<tr>
<td>Psychiatric Hospitals</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>General Hospital</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>with Psychiatric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuropsychiatric</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Units</td>
<td></td>
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## Human Resources for Neuropsychiatry

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<tr>
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<td>26,000,000</td>
<td>200,000,000</td>
</tr>
<tr>
<td>Psychiatric nurses</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>585</td>
<td>1460</td>
</tr>
<tr>
<td>Psychiatrist/Neuropsychiatrist</td>
<td>2/0</td>
<td>2/0</td>
<td>1</td>
<td>18/0</td>
<td>200/4</td>
</tr>
<tr>
<td>Psychiatrist per Million</td>
<td>0.5</td>
<td>0.5</td>
<td>0.3</td>
<td>0.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Clinical Psychologist/Neuropsychologist</td>
<td>1</td>
<td>0/0</td>
<td>1</td>
<td>50/2*</td>
<td>130/0</td>
</tr>
<tr>
<td>Radiologist/Neuroradiology</td>
<td>2</td>
<td>N/A</td>
<td>6</td>
<td>100/5</td>
<td>500/10</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>35</td>
</tr>
</tbody>
</table>
High-end Facilities for Investigating Neuropsychiatric disorders in some West African countries.

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<tr>
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<td>2,000,000</td>
<td>6,000,000</td>
<td>26,000,000</td>
<td>200,000,000</td>
</tr>
<tr>
<td>CT SCAN</td>
<td>NA</td>
<td>NA</td>
<td>2</td>
<td>NA</td>
<td>50</td>
</tr>
<tr>
<td>MRI</td>
<td>NA</td>
<td>NA</td>
<td>0</td>
<td>NA</td>
<td>30 (1.5 TESLA X5)</td>
</tr>
<tr>
<td>PET</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SPECT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>SPECT-CT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Teaching of Neuropsychiatry
Neuropsychiatry – Medical students

• In Nigeria and Ghana Neuropsychiatry is taught to medical students in many universities.

• The programme is such as to impart adequate skills, and a high order of knowledge about the diagnosis, management, and prevention of all Neuropsychiatric disorders.
Neuropsychiatry in Postgraduate Medical education

• MSc Psychiatry University of Ibadan- Neuropsychiatry is a whole course (4years)

• West Africa College of Physicians Faculty of Psychiatry(WACP)---Neuropsychiatry Module (For 5 years)
Research
• Major increase in mental health research in the region over the last three decades, notable examples include:

• Indianapolis Ibadan Epidemiological study of Dementia.
  – A longitudinal, prospective population based comparative epidemiological study.
The project compares samples of community dwelling elderly African Americans living in Indianapolis to Yoruba living in Ibadan, Nigeria.

lower incidence and prevalence of Alzheimer's disease and dementia in the Yoruba compared to the African Americans.

APOE ε4 was a significant risk factor for Alzheimer's disease and dementia in the African Americans while no association was found for the Yoruba.
The project has been approved for a genome wide association analysis for the Yoruba to be carried out by the Center for Inherited Diseases Research at Johns Hopkins.
Multidisciplinary NeuroAIDS Research Training to Improve HIV Outcomes in Nigeria

Taiwo, Babafemi O.  Robertson, Kevin R.
Northwestern University at Chicago, Chicago, IL, United States

Abstract

Nigeria has the second highest HIV burden and one of the highest rates of perinatal HIV transmission globally. HIV adversely affects the brain across the age spectrum (NeuroAIDS), causing a variety of derangements including neurocognitive, neurodevelopmental and neuropsychiatric disorders. These disorders worsen quality of life and drive poor adherence to antiretroviral treatment (ART), thereby increasing the risk of ART failure, morbidity, mortality, and HIV spread. Because relevant research has been neglected, there is no evidence-base to inform clinical practice locally and progress in the field has been limited. We have isolated the omissions in research infrastructure stunting emergence of a versatile NeuroAIDS research team and limiting NeuroAIDS research productivity despite over 20 years of dementia and related research at the University of Ibadan. We propose to capitalize on collaborations between diverse committed scientists and institutions, to address these omissions and develop sustainable
Training Grants

Following are research initiatives related to current training grants. Learn more about the investigators and work below.

- **Building Research And Innovation in Nigeria’s Science (BRAINS)**
- **Developing Innovative Interdisciplinary Biomedical Engineering Programs in Africa (D43)**
- **HIV and Mycobacterial Disease in Mali (D43)**
- **Medical Education Partnership Initiative in Nigeria (MEPIN)**
- **Multidisciplinary NeuroAIDS Research Training to Improve HIV Outcomes in Nigeria (D43)**
- **Northwestern and Jos University Research Training Program in HIV and Malignancies**
- **Support of Training and Mentoring in Nigeria for Academics (STAMINA)**
POSITIVE DEVELOPMENTS AND PROMISING TRENDS IN PSYCHIATRY IN WEST AFRICA

• World Health Organization (W.H.O) Collaborating Centre for Research and Training in Mental Health, Neuroscience, and Substance Abuse, Department of Psychiatry, University of Ibadan, Nigeria.

• Institute of Neuroscience at University of Ibadan

• Increasing collaborative care in Neurology, Neuroradiology, Neuropsychology, Neurosurgery
• Health insurance that covers mental health is becoming increasingly available in the region.

• Increase in time spent by medical students and postgraduate in psychiatry posting during undergraduate training.
• Increasing specialization from Psychologist, Radiologist, Physiotherapist etc
Conclusion
Conclusion

• Neuropsychiatry Subspecialty is undergoing some positive developments in the West African subcontinent despite the challenges it has faced in the past.

• More still needs to be done in terms of service provision, teaching and research.
Thank You