

Global Collaboration for Brain Health

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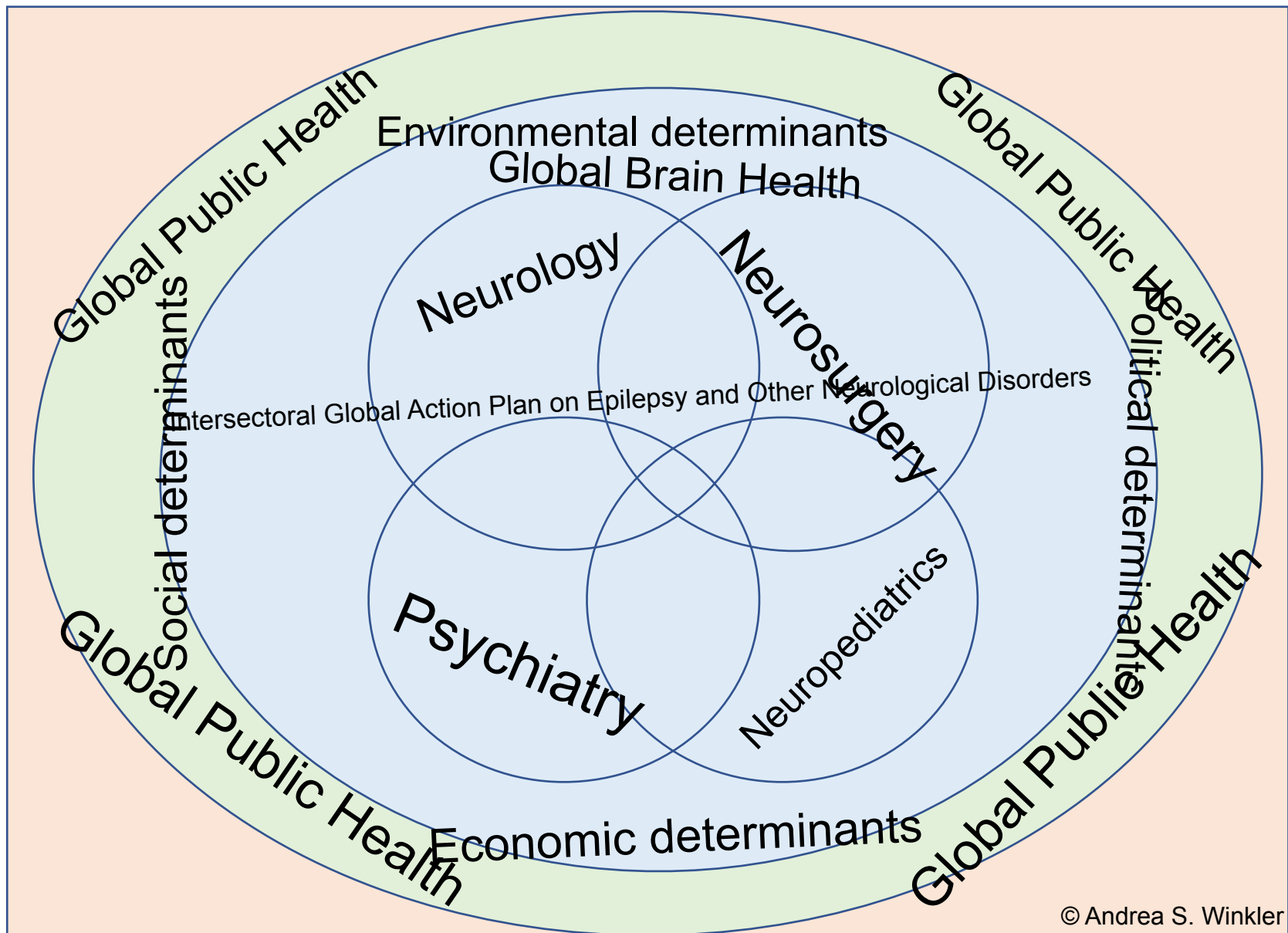
**PROGRAM IN GLOBAL SURGERY
AND SOCIAL CHANGE**
Harvard Medical School



The role of Global Neurology

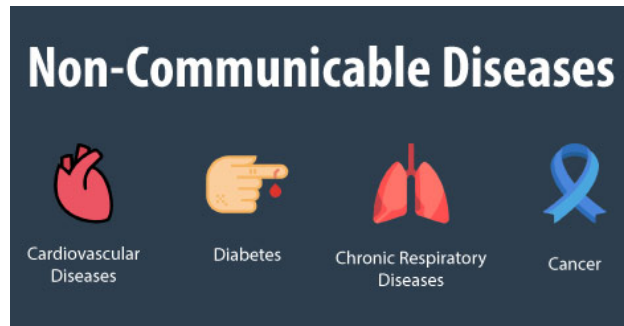
"Brain health is the greatest challenge of societies in the 21st century" –
Dr Elena Becker-Barroso, Editor-in-Chief of *The Lancet Neurology*

The Global Brain Health Framework

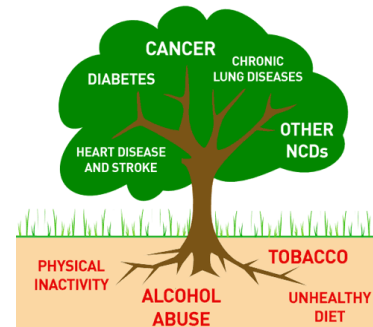
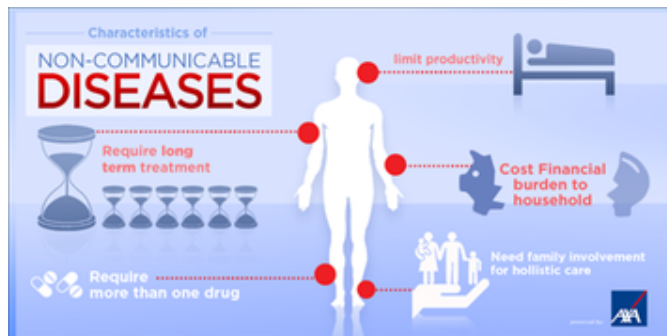


The epidemiological transition

Numbers of the WHO are staggering: “non-communicable diseases kill 41 million people each year, equivalent to **74% of all deaths globally** (Source: WHO, Key Facts, 2023).



Source: <https://www.indushealthplus.com/ncds-non-communicable-diseases.html>



Source: <https://www.dianova.ngo/press-reviews/non-communicable-diseases-an-emerging-priority-worldwide/>



Source: Courtesy Bente Mikkelsen; World Health Organisation

5X5

DISEASES



Cardiovascular Disease



Chronic Respiratory Diseases



Cancer



Diabetes



Mental and Neurological Conditions

RISK FACTORS



Unhealthy Diet



Tobacco Use



Harmful Use of Alcohol



Physical Inactivity



Air Pollution

| | Global | Central Europe, eastern Europe, and central Asia | | | High-income | | | | | Latin America and Caribbean | | | | North Africa and Middle East | | South Asia | | | Southeast Asia, east Asia, and Oceania | | | Sub-Saharan Africa | | | |
|------------------------------|--------|--|----------------|----------------|-------------|--------------------------|---------------------------|------------------------|----------------|-----------------------------|-----------|-----------------------|------------------------|------------------------------|----|------------|----|----|--|---------|----------------|----------------------------|----------------------------|-----------------------------|----------------------------|
| | | Central Asia | Central Europe | Eastern Europe | Australasia | High-income Asia Pacific | High-income North America | Southern Latin America | Western Europe | Andean Latin America | Caribbean | Central Latin America | Tropical Latin America | | | | | | East Asia | Oceania | Southeast Asia | Central sub-Saharan Africa | Eastern sub-Saharan Africa | Southern sub-Saharan Africa | Western sub-Saharan Africa |
| Stroke | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Neonatal encephalopathy | 2 | 3 | 10 | 8 | 10 | 8 | 9 | 6 | 9 | 3 | 2 | 5 | 5 | 5 | 2 | 2 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| Migraine | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 1 | 2 | 4 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 5 | 6 | 3 | 4 | 4 | 4 |
| Dementia | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 5 | 5 | 4 | 3 | 4 | 5 | 2 | 5 | 4 | 3 | 4 | 5 | 5 | 5 | 5 | 5 |
| Diabetic neuropathy | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 4 | 3 | 6 | 5 | 2 | 5 | 6 | 7 | 4 | 6 | 6 | 6 | 6 |
| Meningitis | 6 | 16 | 21 | 18 | 20 | 20 | 22 | 16 | 21 | 19 | 7 | 17 | 16 | 15 | 8 | 16 | 9 | 6 | 4 | 3 | 6 | 3 | 3 | 3 | 3 |
| Epilepsy | 7 | 6 | 7 | 11 | 8 | 6 | 8 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 9 | 6 | 9 | 7 | 5 | 7 | 7 | 7 | 7 | 7 |
| Preterm birth* | 8 | 9 | 9 | 14 | 7 | 7 | 6 | 8 | 8 | 9 | 8 | 8 | 8 | 8 | 4 | 11 | 7 | 8 | 10 | 10 | 9 | 10 | 10 | 10 | 10 |
| Autism spectrum disorder | 9 | 8 | 6 | 5 | 4 | 5 | 5 | 5 | 5 | 8 | 9 | 7 | 9 | 9 | 11 | 7 | 10 | 7 | 9 | 9 | 8 | 9 | 9 | 9 | 9 |
| Nervous system cancer | 10 | 7 | 5 | 6 | 6 | 11 | 7 | 9 | 6 | 7 | 10 | 9 | 7 | 7 | 13 | 6 | 18 | 11 | 19 | 13 | 12 | 21 | 21 | 21 | 21 |
| Parkinson's disease | 11 | 10 | 11 | 13 | 12 | 13 | 10 | 11 | 11 | 10 | 11 | 12 | 11 | 10 | 12 | 8 | 11 | 10 | 11 | 12 | 11 | 12 | 12 | 12 | 12 |
| Neural tube defects | 12 | 19 | 24 | 22 | 19 | 19 | 19 | 15 | 22 | 18 | 12 | 18 | 15 | 13 | 15 | 18 | 8 | 13 | 8 | 8 | 18 | 8 | 8 | 8 | 8 |
| Encephalitis | 13 | 12 | 18 | 17 | 22 | 18 | 24 | 19 | 23 | 13 | 19 | 16 | 22 | 20 | 9 | 15 | 16 | 12 | 22 | 15 | 20 | 13 | 13 | 13 | 13 |
| Traumatic brain injury | 14 | 11 | 8 | 7 | 13 | 14 | 14 | 14 | 14 | 11 | 14 | 10 | 10 | 11 | 14 | 10 | 12 | 14 | 15 | 19 | 15 | 17 | 17 | 17 | 17 |
| Tension-type headache | 15 | 13 | 13 | 10 | 14 | 12 | 13 | 13 | 13 | 15 | 16 | 15 | 14 | 14 | 16 | 12 | 13 | 15 | 14 | 16 | 16 | 14 | 14 | 14 | 14 |
| Other neurological disorders | 16 | 15 | 15 | 9 | 11 | 9 | 11 | 12 | 12 | 12 | 13 | 11 | 12 | 17 | 21 | 14 | 15 | 18 | 18 | 20 | 10 | 11 | 11 | 11 | 11 |

- In 2021 43.1% of the population suffered from neurological disorders (GBD 2024)
- Neurological disorders are the number one cause of disability and the number two cause of death globally!
- One in two people will develop one or more psychiatric disorders in their lifetime (McGrath et al. 2023).

The True Global Burden of Neurology

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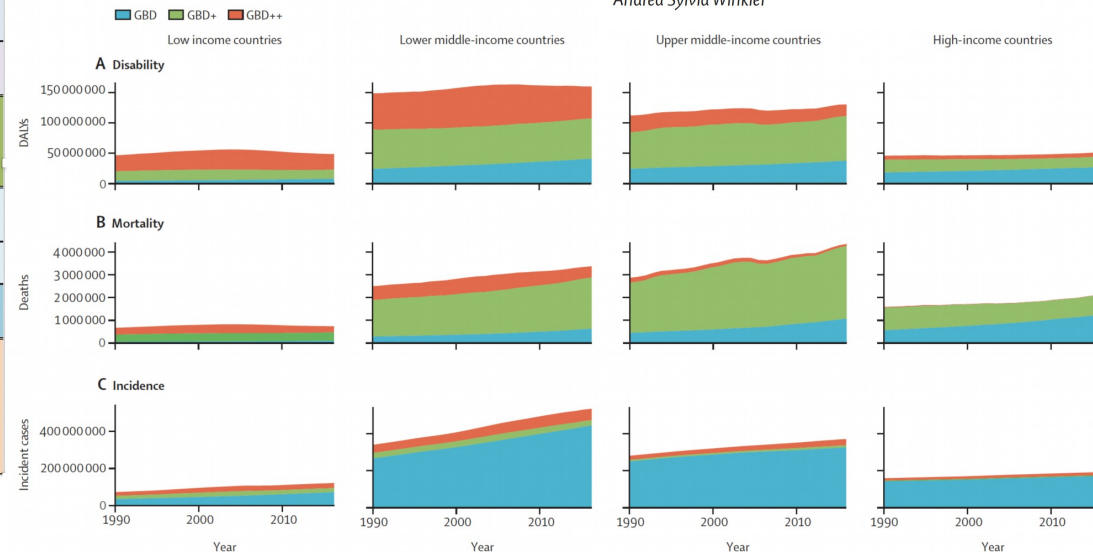
| Causes | Number of DALYs (both sexes and all ages) in 2017 [thousands] | Comments |
|--|---|---|
| Neurological disorders as per IHME definition | 111 000 | As appearing in the GBD neurology category |
| Additional neurological disorders | 234 000 | As appearing in other GBD categories |
| Disorders with neurological involvement | 57 000 | Not appearing separately in any category GBD |
| Neurological disorders total | 410 000 | All three neurology categories |
| Psychiatric disorders without self-harm | 123 000 | As appearing in the GBD mental disorder category |
| Self-harm | 34 000 | As appearing in other GBD categories |
| Psychiatric disorders with self-harm | 157 000 | All three mental disorder category |
| Mental health disorders total (=Neurological disorders + psychiatric disorders including self-harm) | 559 000 | Neurology and mental disorders together as mental health disorders |



Insight

An emphasis on neurology in low and middle-income countries

Samuel Knauss, Dominik Stelzle, Julius Valentin Emmrich, Maria Stylianou Korsnes, James J Sejvar, Andrea Sylvia Winkler



Number of DALYs by disease category, excerpt, 2017

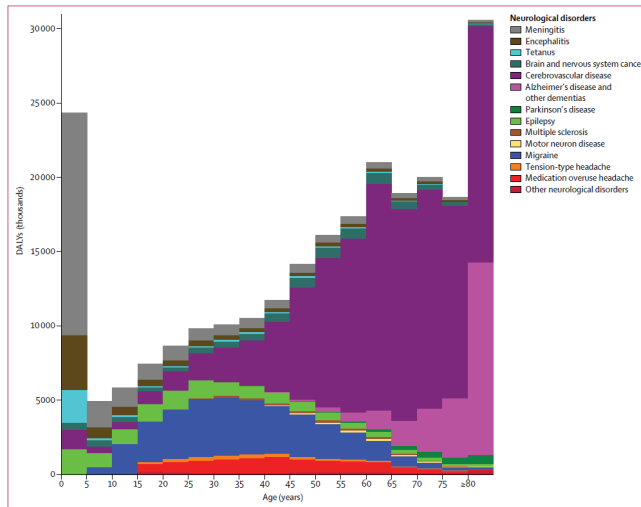
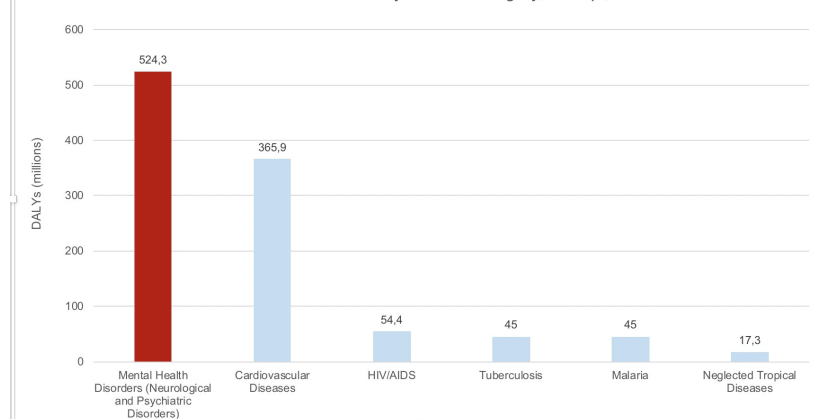


Figure 1: Global DALYs by age and neurological disorder in 2015
DALYs=disability-adjusted life-years.

© Andrea S. Winkler

| | Both sexes | Males | Females |
|---|--------------------------|--------------------------|--------------------------|
| Non-communicable disorders | 82.8% (78.5–86.2) | 81.9% (78.0–85.0) | 83.6% (78.5–87.5) |
| Stroke | 37.9% (29.9–46.1) | 39.5% (31.6–47.6) | 36.2% (27.0–45.6) |
| Headache disorders | 17.5% (3.6–32.5) | 14.2% (2.9–27.1) | 21.0% (4.5–38.0) |
| Migraine | 16.0% (2.5–31.1) | 12.8% (2.0–25.6) | 19.2% (3.0–36.4) |
| Tension-type headache | 1.6% (0.5–5.8) | 1.5% (0.4–6.1) | 1.7% (0.5–5.6) |
| Epilepsy | 11.3% (9.0–14.3) | 12.1% (9.7–15.1) | 10.5% (8.0–13.7) |
| Idiopathic epilepsy | 6.4% (4.8–8.0) | 6.8% (5.4–8.5) | 5.9% (4.2–7.7) |
| Secondary epilepsy | 5.0% (3.6–6.7) | 5.3% (3.8–7.1) | 4.6% (3.3–6.4) |
| Cerebral palsy | 5.7% (4.2–7.7) | 5.9% (4.3–7.9) | 5.5% (3.9–7.6) |
| Alzheimer's disease and other dementias | 4.6% (1.9–10.4) | 4.0% (1.6–9.4) | 5.2% (2.1–11.7) |
| Brain and CNS cancer | 2.2% (1.7–2.8) | 2.5% (1.7–3.3) | 1.9% (1.4–2.6) |
| Parkinson's disease | 1.8% (1.4–2.2) | 2.0% (1.6–2.4) | 1.6% (1.2–2.0) |
| Multiple sclerosis | 0.2% (0.2–0.3) | 0.2% (0.2–0.3) | 0.3% (0.2–0.4) |
| Motor neuron diseases | 0.1% (0.1–0.2) | 0.1% (0.1–0.2) | 0.1% (0.1–0.2) |
| Other neurological disorders* | 1.3% (0.9–1.7) | 1.3% (0.9–1.8) | 1.3% (0.9–1.7) |
| Communicable disorders | 11.2% (8.4–15.0) | 10.7% (8.2–14.6) | 11.8% (8.5–16.5) |
| Encephalitis | 5.3% (3.7–8.9) | 5.0% (3.6–9.2) | 5.6% (3.8–9.3) |
| Meningitis | 4.8% (3.7–6.1) | 4.5% (3.5–5.7) | 5.1% (3.7–6.6) |
| Tetanus | 1.1% (0.7–1.8) | 1.2% (0.6–2.1) | 1.1% (0.6–1.8) |
| Injuries | 6.0% (4.6–7.7) | 7.4% (5.7–9.5) | 4.6% (3.4–6.2) |
| Traumatic brain injuries | 4.1% (3.0–5.4) | 5.1% (3.8–6.8) | 3.0% (2.1–4.1) |
| Spinal cord injuries | 1.9% (1.5–2.5) | 2.2% (1.7–2.8) | 1.6% (1.2–2.2) |

Data in parentheses are 95% uncertainty intervals. *Other non-communicable neurological disorders include a list of uncommon diseases, for which the International Classification of Diseases codes are shown in the appendix (pp 7–12).

Table 1: Contribution of neurological disorders to total neurological disorder disability-adjusted life-years in India, 2019

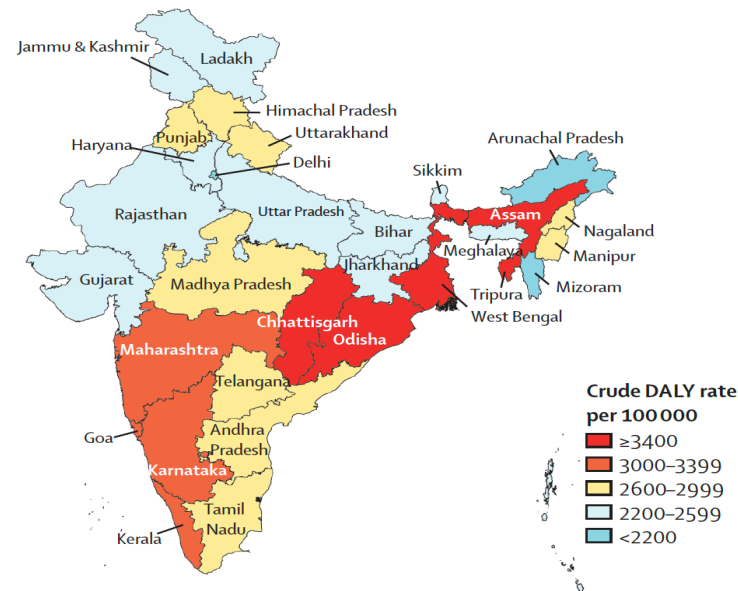
Brain Health Initiative



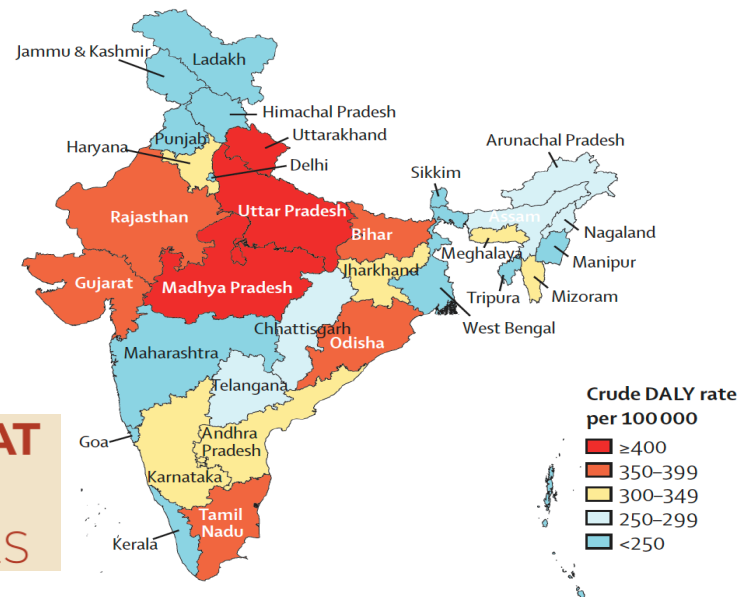
AYUSHMAN BHARAT HEALTH AND WELLNESS CENTRES

India is already implementing exemplary practices in the national implementation of brain health. Scaling and learning will provide important lessons for the rest of the world. It is time for India to lead on brain health implementation.

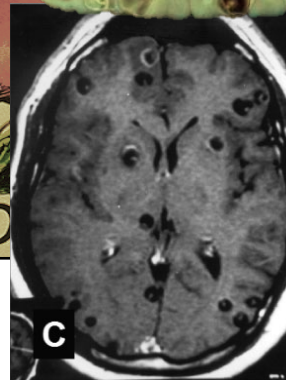
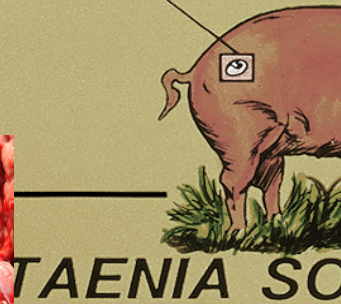
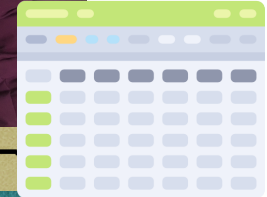
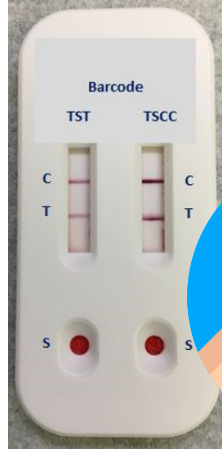
A Non-communicable neurological disorders

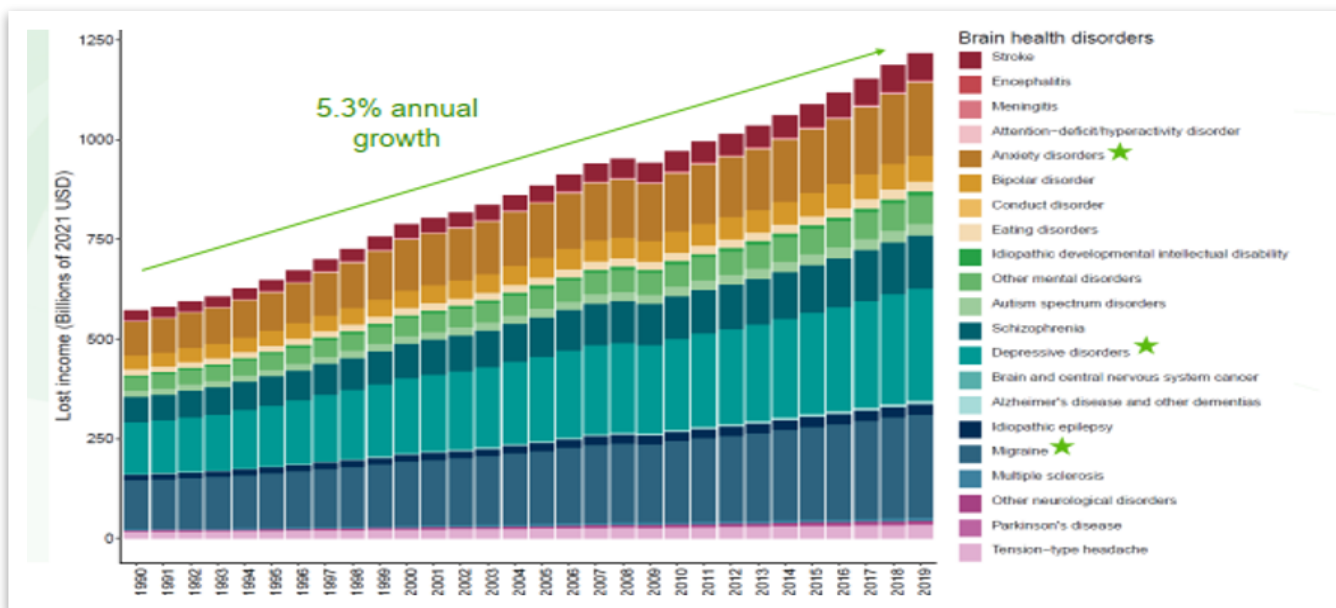


B Communicable neurological disorders



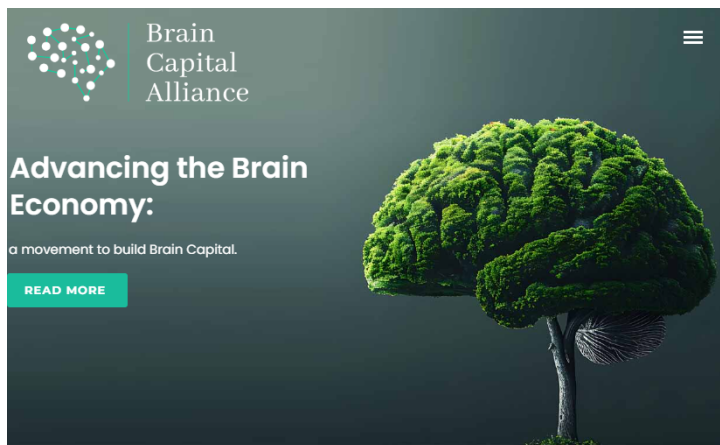
Source: India State-Level Disease Burden Initiative Neurological Disorders Collaborators. Lancet Glob Health 2021; 9: e1129–44





❑ **\$1.2 trillion globally** (in 2021 USD) was lost in income by people with brain conditions in 2019. This number has increased over time, at over **5%** per year since 1990.

❑ This loss of income varies across the lifespan. **Most lost income occurs relatively early in life, which is not always what we envision when we think about the impact of brain health.**



The Yaoundé Declaration

[Alfred K Njamnshi](#)^{a,b,c,d} · [Agustin Ibanez](#)^{e,f} · [Gagandeep Singh](#)^{g,h,i} · [Mika Pyykko](#)^j · [Vladimir Hachinski](#)^k · [Harris A Eyre](#)^{l,m,n} 

· et al. [Show more](#)

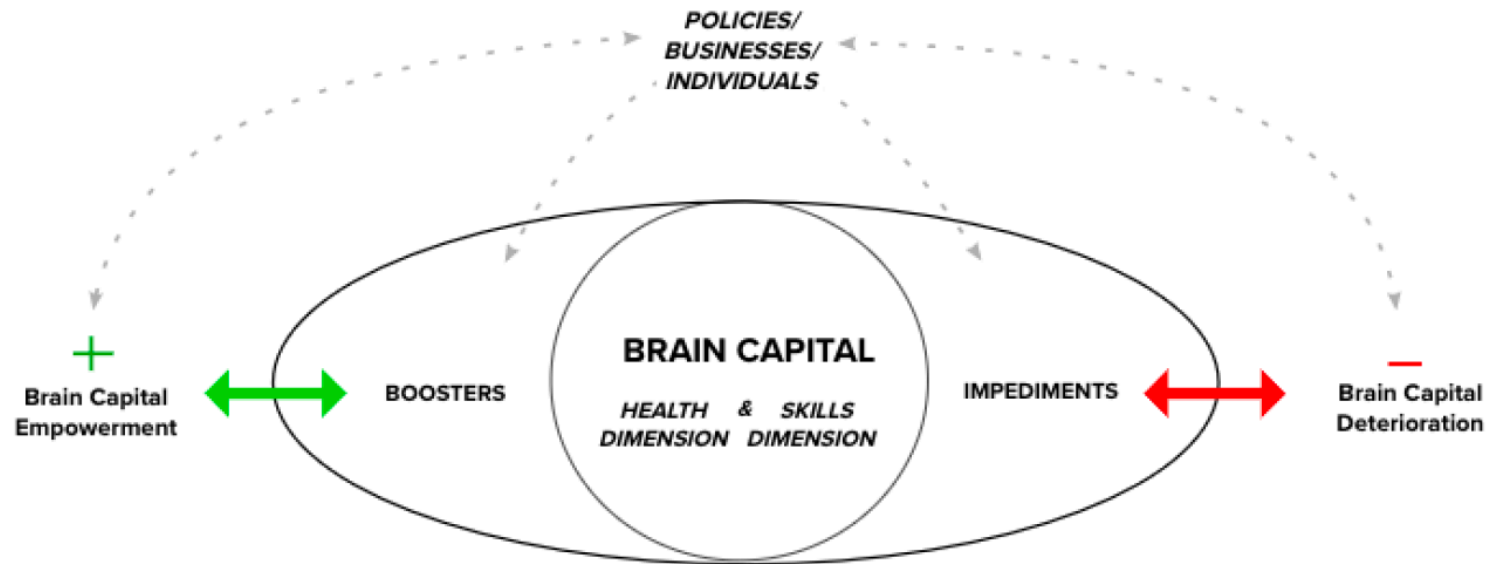
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 Outline

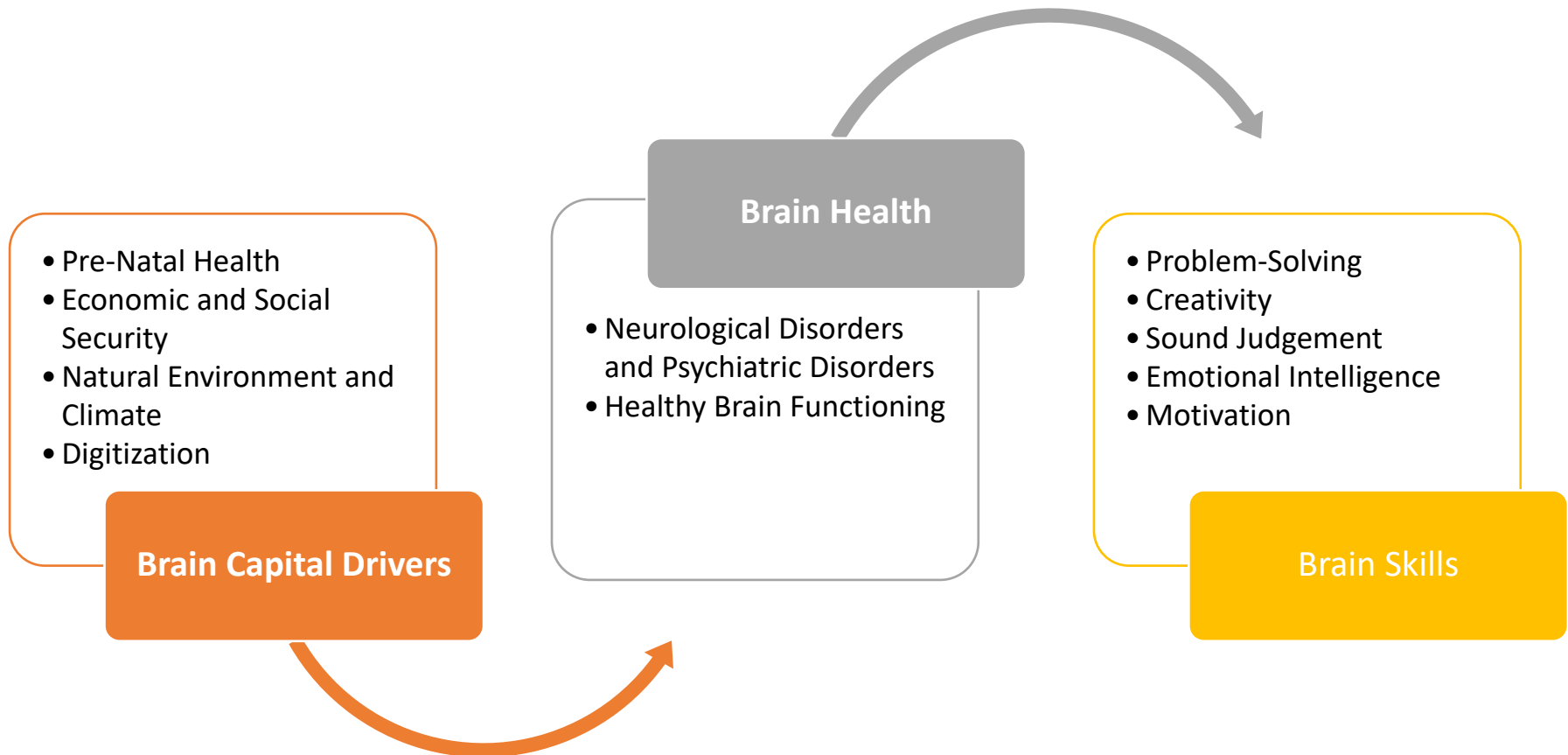
The Scientific Technical Meeting of the African High-Level Science Summit was held on [World Brain Day 2024](#). In this Summit, we launched the *Yaoundé Declaration on Brain Economy, Brain Health & Brain Capital*. The Yaoundé Declaration marks an historic milestone in advancing global brain health and economic resilience for societal transformation. In this Declaration, we provide a detailed roadmap for the brain economy transition.

The Brain Capital Dashboard



Source: Brookings Institute. 2022. The Global Brain Capital Dashboard.

The Brain Capital Dashboard



Global brain health—the time to act is now

The recently published 2021 Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) data on neurological disorders represents a comprehensive analysis of 37 neurological conditions, amounting to

Brain health transcends traditionally separate disciplines, including neurology, neurosurgery, mental health, and neurodevelopment. However, despite the ever-growing socioeconomic importance of brain



Lancet Glob Health 2024
Published Online
March 14, 2024
[https://doi.org/10.1016/S2214-109X\(23\)00602-2](https://doi.org/10.1016/S2214-109X(23)00602-2)

COMMUNITY PAPER

Global Brain Health – Action urgently required!

A Policy Brief of the Global Health Hub Germany Community on Non-communicable Diseases

Sustainable development demands brain health

The 78th Session of the UN General Assembly that, if planned according to epidemiological trends (UNGA 78) was gathering in New York City at this and health system capacity in every country, could / 2030 and in the

Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021

GBD 2021 Nervous System Disorders Collaborators*



UN/SDG

The burden of neurological disorders across the states of India: the Global Burden of Disease Study 1990–2019

India State-Level Disease Burden Initiative Neurological Disorders Collaborators*

Summary

Background A systematic understanding of the burden of neurological disorders at the subnational level is not readily available for India. We present a comprehensive analysis of the disease burden and trends of neurological disorders at the state level in India.



Lancet Glob Health 2021;
9: e1129–44
Published Online
July 14, 2021

AFRICAN HIGH LEVEL SCIENCE SUMMIT ON

The Brain Economy, Brain Health, & Brain Capital

Prelude to the
79th United Nations General Assembly, NY, USA

HE Philemon YANG
Grand Chancellor, PRC – President-Elect,
79th United Nations General Assembly
Dates: July 22 - 25, 2024
Venue: Yaounde

Pr. A. K. NJAMNSHI
Founder, Director General
BRAIN Cameroon & Geneva

Pr. Sammy B CHUMBOW
President,
Cameroon Academy of Science (CAS)

Pr. Vladimir Hachinski
Emeritus President,
World Federation of Neurology

Dr. Harris Eyre
Lead,
Brain Capital Alliance,
Baker Institute for Public Policy, USA

Pr. Rym Ayadi
Founder-President
Euro-Mediterranean Economists Association (EMEA)

Pr. Rose Leke
Chair,
African Regional Commission, Polio Eradication Certification

Pr. Graham Fieggen
Director,
Neuroscience Institute, UCT Cape Town

Pr. Zul Merali
Director,
Brain and Mind Institute Nairobi

Pr. Lise Korsten
President,
African Academy of Science

Brain Research Africa Initiative

An International Organisation in Partnership with the African Union Commission & Member of IBI

The Yaoundé Declaration on the Brain Economy, Brain Health, and Brain Capital

With Cameroon assuming the presidency of the 79th United Nations General Assembly (UNGA79), this Declaration aims to demonstrate African leadership in brain and society innovations. Here we outline a new economic approach for African jobs, economic growth, sustainability, resilience, health and well-being. This Declaration lays out a roadmap for how Africa can leapfrog other economies by deftly deploying brain science-inspired policies and investments. The Declaration took into account prior major works outlined in Appendix 1.

nature reviews neurology

<https://doi.org/10.1038/s41582-023-00808-z>

Perspective

Check for updates

Global synergistic actions to improve brain health for human development

Mayowa O. Owolabi^{1,2,3,4,5,6}, Matilde Leonardi⁷, Claudio Bassetti^{8,9}, Joke Jaarsma¹⁰, Tadeusz Hawrot¹⁰, Akintomiwa I. Makanjuola¹¹, Rajinder K. Dhamija¹², Wuwei Feng¹³, Volker Straub¹⁴, Jennifer Camaradou^{15,16}, David W. Dodick^{17,18,19}, Rosita Sunna^{20,21}, Bindu Menon²², Claire Wright²³, Chris Lynch²⁴, Antonella Santucci Chadha²⁵,

THE GLOBAL BRAIN HEALTH PARTNERSHIP

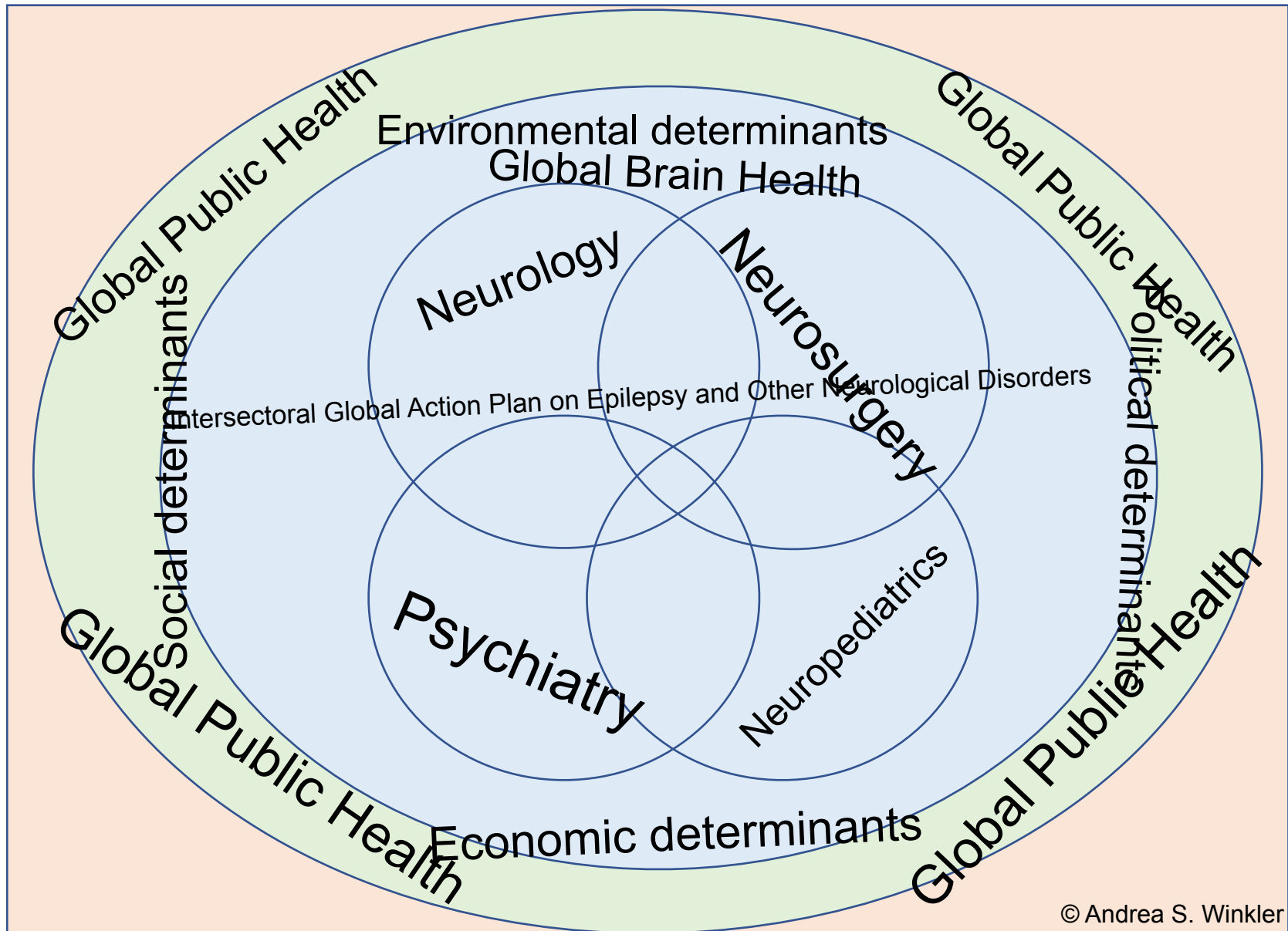
Defining Brain Health - Why it Matters for Policy and Program Action

18 September 2024
15.00-17.00 CEST

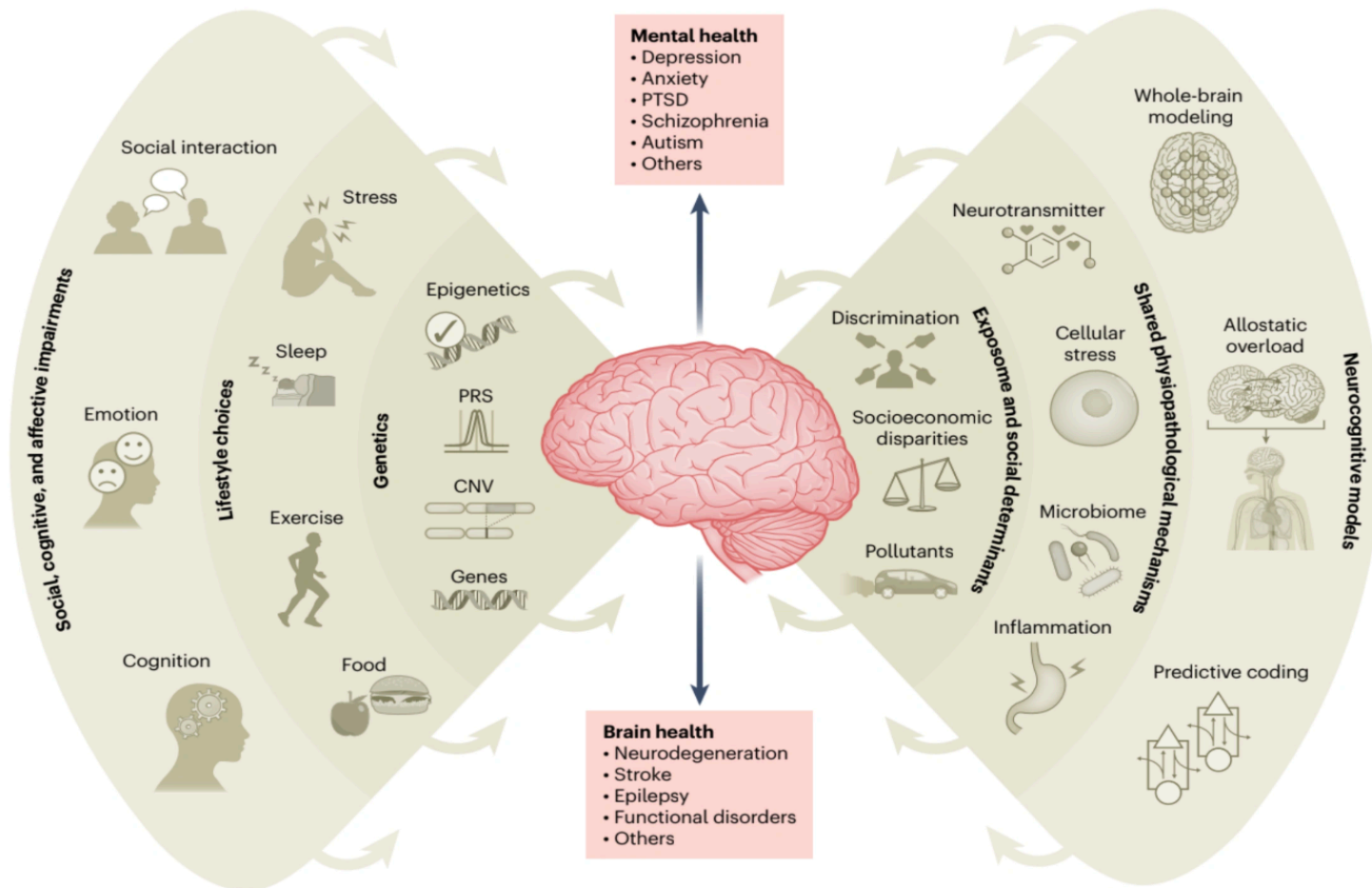
For online registration, please view the link in the email



The Global Brain Health Framework



Brain Health - Interdisciplinarity



Brain Health Determinants - systemic

Table 1 | Organs and organ diseases associated with cognitive decline and dementia

| Organ/system | Condition | Outcome | Ref. |
|------------------|----------------------------|-------------------|------|
| Cardiovascular | Myocardial infarction | Cognitive decline | 19 |
| | | Dementia | 10 |
| | Coronary artery bypass | Cognitive decline | 198 |
| | Heart failure | Cognitive decline | 22 |
| | | Dementia | 10 |
| | Atrial fibrillation | Cognitive decline | 199 |
| | | Dementia | 200 |
| Renal | Low eGFR | Cognitive decline | 34 |
| | | Parkinson disease | 35 |
| Pulmonary | Restrictive lung disease | Cognitive decline | 12 |
| | | Dementia | 12 |
| | COPD | Cognitive decline | 40 |
| | | Dementia | 39 |
| | Asthma | Dementia | 41 |
| | | Dementia | 13 |
| Gastrointestinal | Obstructive sleep apnoea | Dementia | 13 |
| | | Parkinson disease | |
| | Inflammatory bowel disease | Dementia | 43 |
| | Irritable bowel syndrome | Dementia | 14 |
| Hepatic | GERD | Dementia | 14 |
| | | Dementia | 14 |
| | Constipation | Parkinson disease | 54 |
| Endocrine | Type 2 diabetes | Cognitive decline | 15 |
| | | Dementia | 63 |
| Endocrine | Type 2 diabetes | Cognitive decline | 16 |
| | | Dementia | 16 |

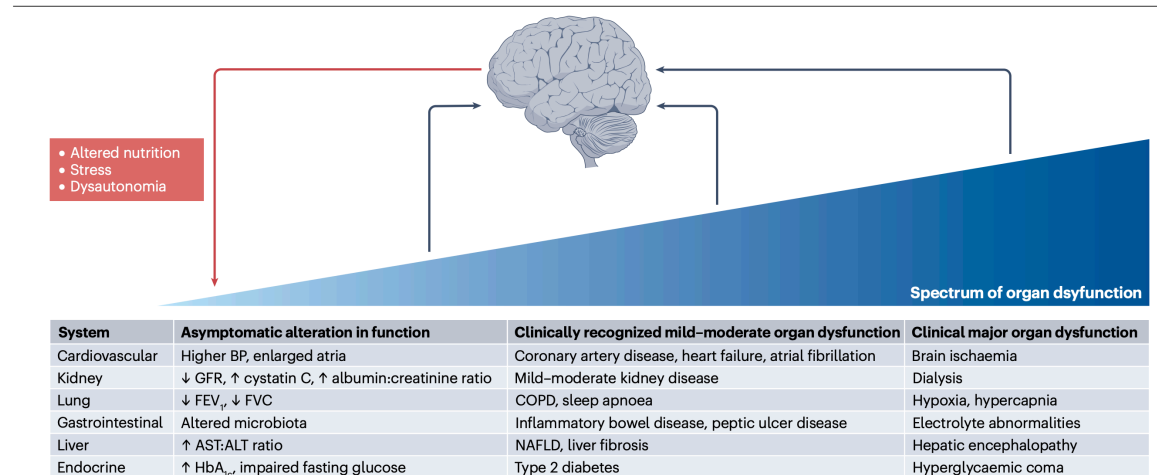


Fig. 1 | Spectrum of organ dysfunction and its association with neuro-degeneration and cognitive decline. Frank organ failure (far right) has long been recognized as a cause of acute encephalopathy mediated by various derangements, including hypoxia, ischaemia and metabolic abnormalities. More recent evidence shows that a spectrum of organ dysfunction, from asymptomatic alterations in functional tests to clinically recognized mild diseases, can increase the risk of later-life cognitive decline. Each of the abnormalities

shown has been linked with future risk of cognitive decline in population-based cohort studies^{10,11,13,14,16,25,34,38,43,48,59,63}. In turn, brain dysfunction can induce organ dysfunction through neurohumoral mechanisms and poor self-care. ALT, alanine aminotransferase; AST, aspartate aminotransferase; BP, blood pressure; COPD, chronic obstructive pulmonary disease; FEV₁, forced expiratory volume in the first second; FVC, forced vital capacity; GFR, glomerular filtration rate; HbA_{1c}, haemoglobin A_{1c}; NAFLD, nonalcoholic fatty liver disease.

Associations of selected organ disorders with prospective risk of cognitive decline and dementia, according to epidemiological studies. Note that we have omitted thyroid hormone disorders and hyperparathyroidism causing hypercalcaemia, as these are already well-recognized causes of reversible dementia for which diagnostic testing is already recommended by dementia guidelines²⁰¹. COPD, chronic obstructive pulmonary disease; eGFR, estimated glomerular filtration rate; GERD, gastro-oesophageal reflux disease.

Brain Health Determinants - social

Social Determinants of Health

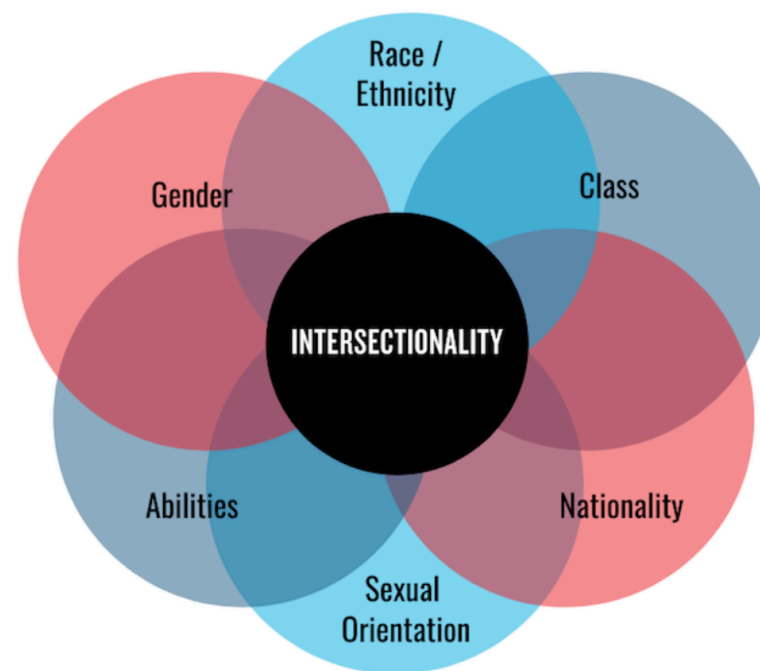


Image: First Book

Social Determinants of Health

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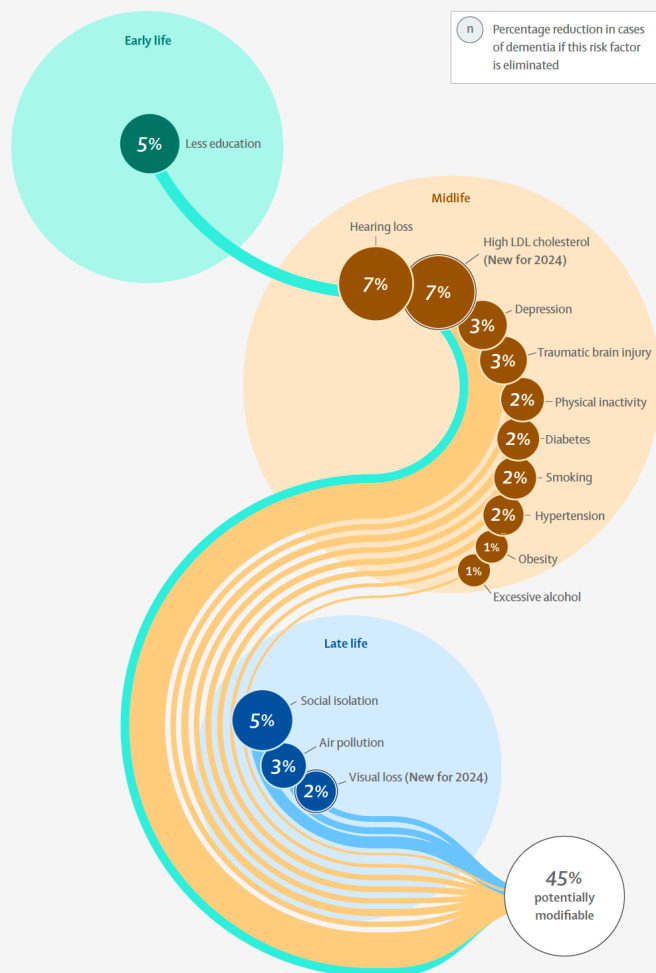


Source: <https://www.namidanecounty.org/blog/2022/3/30/pgsrb196qsbg05c2ma62img929smff>

Source: Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. <https://odphp.health.gov/healthypeople/objectives-and-data/social-determinants-health>

Risk factors for dementia — 2024 update

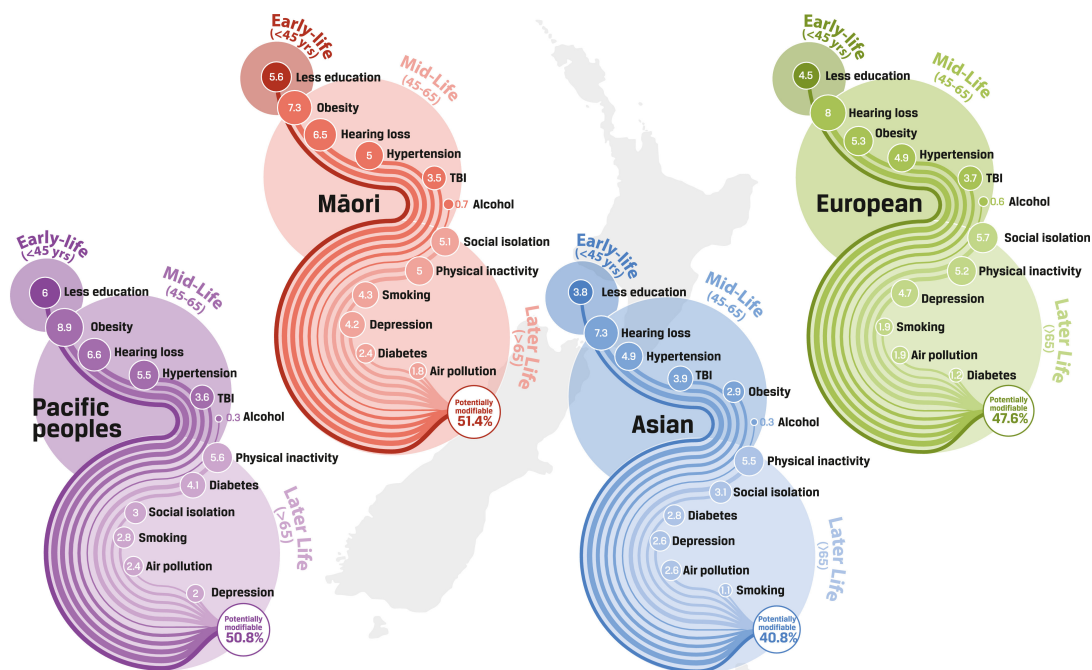
The 2024 update to the standing Lancet Commission on dementia prevention, intervention, and care adds two new risk factors (high LDL cholesterol and vision loss) and indicates that nearly half of all dementia cases worldwide could be prevented or delayed by addressing 14 modifiable risk factors.



Read the full commission update at [thelancet.com/commissions/dementia-prevention-intervention-care](https://www.thelancet.com/commissions/dementia-prevention-intervention-care)

Livingston G, Huntley J, Liu KY, et al. Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. *The Lancet* 2024; published online July 31. [https://doi.org/10.1016/S0140-6736\(24\)01296-0](https://doi.org/10.1016/S0140-6736(24)01296-0).

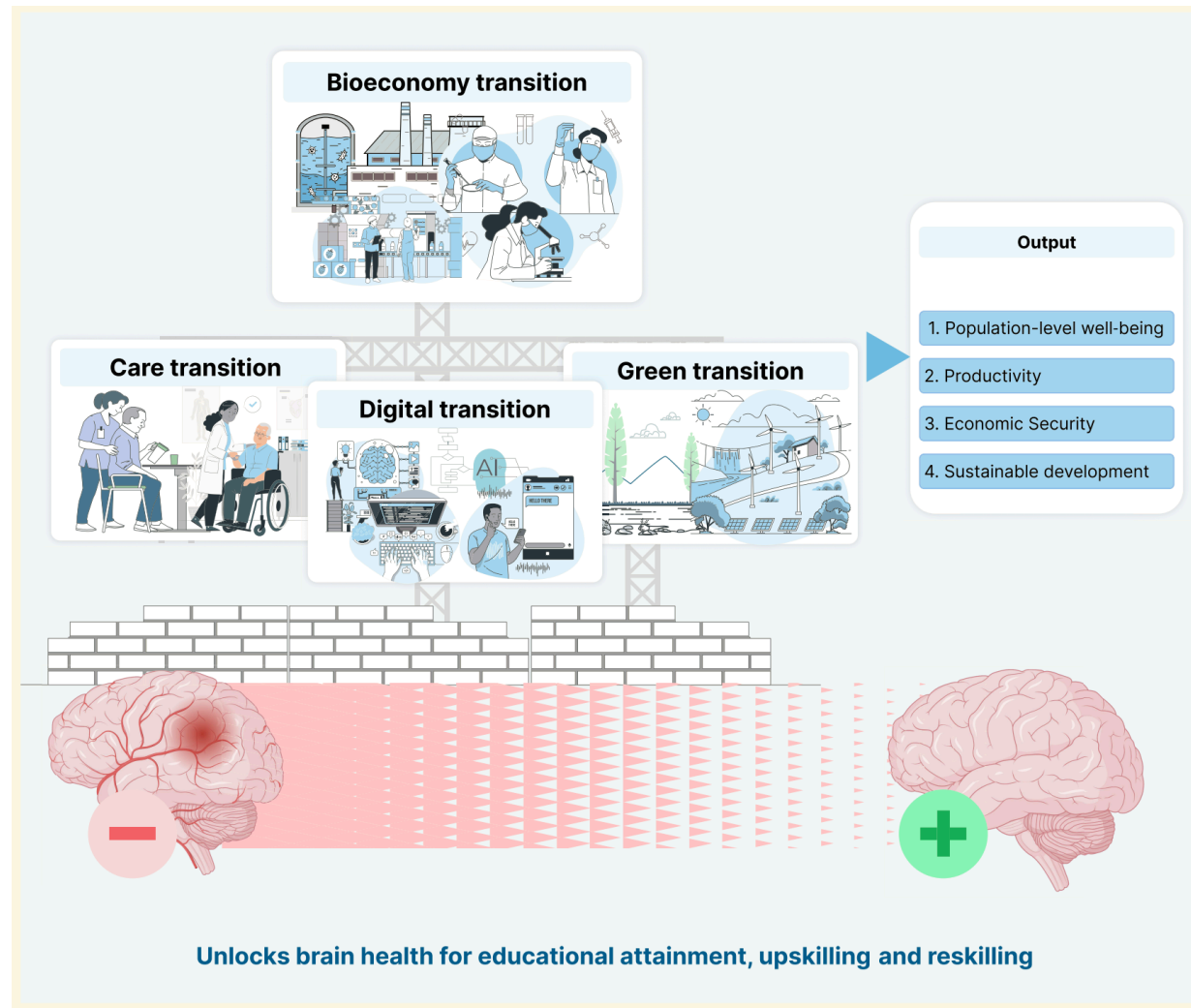
Brain Health Determinants - lifestyle



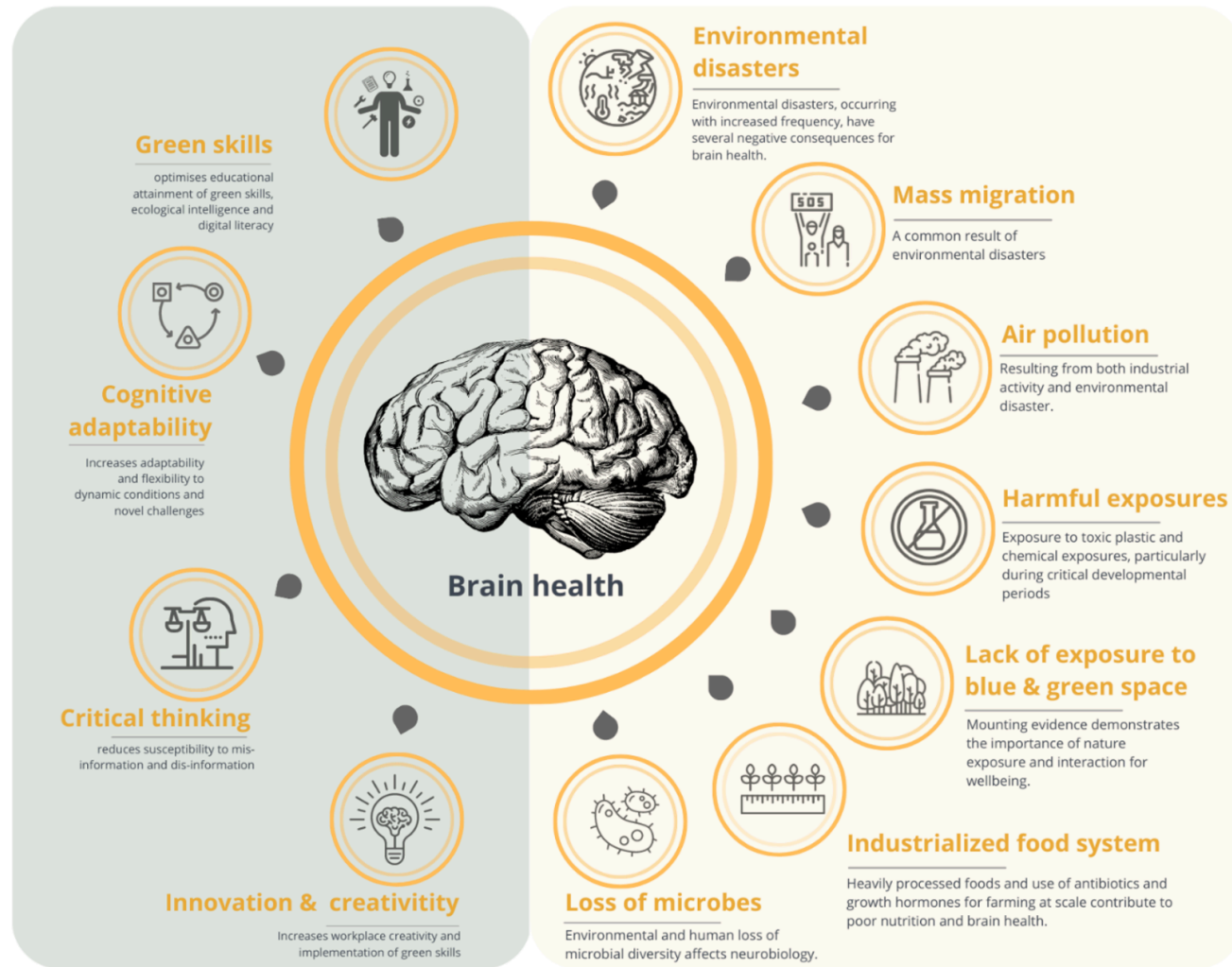
Relative population attributable fraction (PAF) contributions of each risk factor across four ethnic groups in New Zealand

Source: [https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065\(21\)00100-0/fulltext](https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065(21)00100-0/fulltext)

Brain Health Determinants - economic



Brain Health Determinants - environmental



Brain Health Determinants - political



Which national NCD
responses work best?



Whole-of-government approaches:

2/3 of health gains for NCDs can be achieved by influencing public policies in sectors like trade, taxation, education, agriculture, urban development, food and pharmaceutical production (vs. **1/3** by making changes in the health policy alone)



Brain health

Overview

Burden

WHO Response

Brain Health is an emerging and growing concept that encompasses neural development, plasticity, functioning, and recovery across the life course.

Good brain health is a state in which every individual can realize their own abilities and optimize their cognitive, emotional, psychological and behavioural functioning to cope with life situations. Numerous interconnected social and biological determinants (incl. genetics) play a role in brain development and brain health from pre-conception through the end of life. These determinants influence the way our brains develop, adapt and respond to stress and adversity, giving way to strategies for both promotion and prevention across the life course.

THE LANCET
Neurology

CORRESPONDENCE | VOLUME 19, ISSUE 6, P482-484, JUNE 01, 2020

A call for a global COVID-19 Neuro Research Coalition

Andrea Sylvia Winkler ✉ • Samuel Knauss • Erich Schmutzhard • Matilde Leonardi • Alessandro Padovani •
Foad Abd-Allah • et al. [Show all authors](#)

Published: June, 2020 • DOI: [https://doi.org/10.1016/S1474-4422\(20\)30150-2](https://doi.org/10.1016/S1474-4422(20)30150-2)

References

Article Info

Linked Articles

Reports are emerging at a rapid pace that the severe acute respiratory syndrome coronavirus system in various ways. Preliminary data from Wuhan, China, suggest that neurological manifestations of patients presenting with coronavirus disease 2019 (COVID-19).¹ Neurological features range and symptoms like headache, dizziness, reduced level of consciousness, confusion, diffuse co paraesthesia, to more specific manifestations, such as seizures, stroke, encephalitis, or meningitis. The hypothesis of neurotropism with subsequent neuronal injury, either directly or indirectly supported by previous findings from other infections with severe acute respiratory syndrome

Fact sheets

Data

Guidelines

THE LANCET
Neurology

CORRESPONDENCE | VOLUME 20, ISSUE 3, P171-172, MARCH 01, 2021

A WHO resolution on epilepsy and other neurological disorders

Andrea Sylvia Winkler ✉ • Matilde Leonardi • Benedict Daniel Michael • Foad Abd-Allah • William Carroll •
Alla Guekht • and the Global COVID-19 Neuro Research Coalition[†] • [Show less](#) • [Show footnotes](#)

Published: March, 2021 • DOI: [https://doi.org/10.1016/S1474-4422\(21\)00026-0](https://doi.org/10.1016/S1474-4422(21)00026-0)

Supplementary

Material

References

The World Health Assembly, the decision-making body of WHO, passed Resolution WHA74.15 on "Epilepsy and other neurological disorders" on Nov 12, 2020. The resolution encourages Member States to respond to epilepsy and other neurological disorders.¹ This is a landmark resolution recognizing the growing burden of neurological disorders, which are the leading cause of disability worldwide.^{2, 3}



https://www.who.int/health-topics/brain-health#tab=tab_1



World Health
Organization
EXECUTIVE BOARD
150th session
Provisional agenda item 7

EB150/7
11 January 2022

Political declaration of the third high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases

EB150/7



SEVENTY-THIRD WORLD HEALTH ASSEMBLY
Agenda item 11.6

A73/A/CONF./2
9 November 2020

ANNEX 7

DRAFT INTERSECTORAL GLOBAL ACTION PLAN ON EPILEPSY
AND OTHER NEUROLOGICAL DISORDERS 2022–2031

Global Actions on epilepsy and other
neurological disorders

Zero Draft

Public
consultation

Final draft

Review and
translation

Executive
Board 150

75th World
Health
Assembly

May 2022

Jan 2021

**Intersectoral Global Action Plan on Epilepsy and
Other Neurological Disorders
2022 – 2031**
Discussion paper 05/03/2021



<https://unctad.org/civil-society>

Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders 2022 – 2031

Overall aim

The goal of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 is to reduce the **stigma, impact and burden of neurological disorders**, including their associated mortality, morbidity and disability, and to improve the **quality of life** of people with neurological disorders, their **carers and families**.

In order to achieve the vision and goal defined above, the **prevention, treatment** and care of epilepsy and other neurological disorders should be strengthened, wherever possible, utilizing **entry points** and **synergies** to achieve the best results for all.



Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders 2022 – 2031

Main objectives

- ✓ Raise **policy prioritization** and strengthen **governance**
- ✓ Provide effective, timely and responsive **diagnosis, treatment and care**
- ✓ Foster **research** and **innovation** and **information systems**
- ✓ Implement strategies for **promotion** and **prevention**
- ✓ Strengthen the **public health approach** to epilepsy





Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders 2022 – 2031

Guiding Principles

- ✓ **People-centered** primary healthcare and universal health coverage
- ✓ **Integrated** approach to care
- ✓ **Evidence-based** practice
- ✓ **Life-course** approach
- ✓ **Intersectoral** action
- ✓ **Empowerment** of persons with neurological disorders
- ✓ Gender, **equity** and human rights





THE LANCET Neurology

CORRESPONDENCE | VOLUME 17, ISSUE 3, P204, MARCH 01, 2018

The advocacy role of the World Federation of Neurology

Wolfgang Grisold Mohammad Wasay

Published: March, 2018 • DOI: [https://doi.org/10.1016/S1474-4422\(18\)30051-6](https://doi.org/10.1016/S1474-4422(18)30051-6)

The mission of the World Federation of Neurology (WFN) is to foster brain health worldwide



World Federation of Neurology
Fostering quality neurology and brain health worldwide

About Education Resources Publications Membership



WORLD
BRAIN DAY
Brain Health for All

WORLD BRAIN DAY 2022 IS
DEDICATED TO BRAIN HEALTH

JOIN THE WFN IN PROMOTING BRAIN HEALTH FOR ALL



Society of Neuroscientists of Africa

SONA Membership Conferences & Events Grants IBRO ARC Hall of Fame Gallery
News & Articles Affiliate Societies Committees Contact Us

SONA

SONA is The Society of Neuroscientists of Africa.

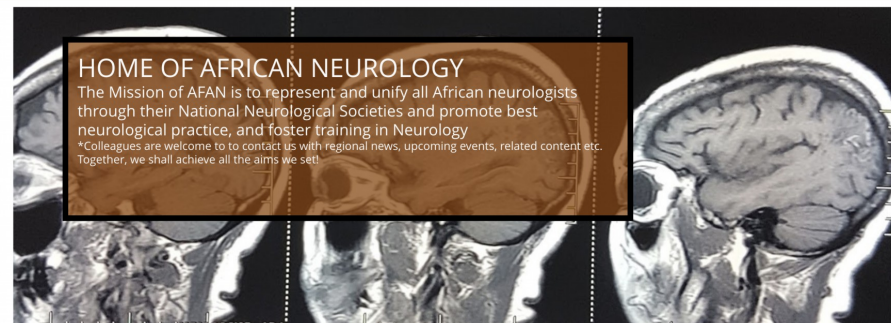
- It is a non-profit organisation registered in Nairobi, Kenya in 1993
- Functions as the umbrella organisation for the regional and national neuroscience societies and groups in Africa
- A member society of the International Brain Research Organization (IBRO)
- Aim is to promote research, teaching and advocacy in Neuroscience in Africa and hold an International conference every two years.



Asian and Oceanian Association of Neurology

Home
History
Executive Committee
Statute and By Laws
AOAN Delegate
AOAN Committee

Future Conferences





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Members' Area

ABOUT PROJECTS E-LEARNING PUBLICATIONS NEWS CONTACT



TRAINING INITIATIVES FOR
NEUROLOGY ADVOCATES

TINA eLearning Platform

EFNA's popular Training Initiatives for
Neurology Advocates (TINA) goes digital!

Our partners:



MULTILINGUAL CONTENT



About ILAE Guidelines Congresses Regions & Countries Journals Patient Care Education Research

Welcome to the International League Against Epilepsy

The world's preeminent association of health care professionals and scientists working toward a
world where no person's life is limited by epilepsy

2022 ILAE Journal Prizes

Congratulations to the 2022 ILAE journal award recipients!

- *Epilepsia* Clinical Science Prize: **Margherita Contento**
- *Epilepsia* Basic Science Prize: **Carmen De Caro**
- *Epilepsia* Open Clinical Science Prize: **Barbara Benova and Hanna Mai Hulshof**
- *Epilepsia* Open Basic Science Prize: **Morgan Sturgeon**
- *Epileptic Disorders* Educational Prize: **Ludovica Maria Piscitello**

[Learn more about ILAE awards](#)



**Crisis in Ukraine
Response & Resources**

GLOBAL ADVOCACY
Action for Epilepsy!



**Young Epilepsy
Section**



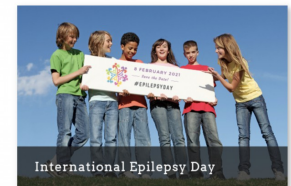
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IBE in Africa



International Epilepsy Day



**International Bureau
for Epilepsy**

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IBE in Africa

There are approximately 10 million people living with epilepsy in Africa where epilepsy is greatly misunderstood, deeply stigmatized, dramatically underfunded and most often ignored by the health care system. Over 75% of people in Africa with epilepsy live in rural and semi-urban areas where treatment is **nearly** non-existent. Knowing that there are affordable drugs and effective, low-cost programs, it is especially egregious that people with epilepsy in Africa continue to suffer.

In 2015, the World Health Organization (WHO) General Assembly passed a landmark epilepsy resolution known as WHA68.20: Global burden of epilepsy and the need for coordinated action at the country level to address its health, social and public knowledge implications. This resolution is tremendously important in that it calls on all member countries to address epilepsy seriously by developing and implementing national plans of action. Despite this global declaration, none of the countries in Africa has developed an epilepsy national plan. There has been no political response nor has there been any financial investments in programs that could reduce the epilepsy treatment and



The Global Brain Health Partnership

Overarching aim: To support countries in advancing their brain health agenda through the community of practice that is represented by *The Global Brain Health Partnership* using a systematic scientific approach.

Burden mapping

Resource mapping

Policy mapping

Needs assessment



GBHP

THE GLOBAL BRAIN HEALTH PARTNERSHIP

PROGRAM IN GLOBAL SURGERY
AND SOCIAL CHANGE
Harvard Medical School



Global Brain Health Unit

Technical
University
of Munich



Promotion of brain health

Prevention of disorders

Management of disorders

Brain health policies

Envisioned outcomes (*work in progress*):

Leverage science and academia through the *The Global Brain Health Partnership* to:

- establish an equitable community of practice platform for open scientific exchange.
- contextualize implementation of brain health interventions accompanied by implementation science.
- support prioritization of brain health at the country level and provide a platform for sharing good practices and amplifying country voices.

Our shared trait is that we are engaged and invested in evidence-based implementation of brain health to impact people, communities, and economies.



Thank you very much for your attention!