THE GLOBAL HEALTH NETWORK
Enabling research by sharing knowledge

Brain Health Clinical Exchange

WFN
WORLD FEDERATION OF NEUROLOGY

Opportunities in Global Brain Health with the World Federation of Neurology

Professor Alla Guekht, MD, PhD

Director, Moscow Research and Clinical Center for Neuropsychiatry

WFN Elected Trustee

Opportunities in Global Brain Health with the World Federation of Neurology

- WFN
- Brain Health
- World Brain Day
- Intersectoral Global Action Plan on Epilepsy and other Neurological Disorders (IGAP)
- Education

WFN

WORLD FEDERATION OF NEUROLOGY

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WORLD FEDERATION OF NEUROLOGY

World Federation of Neurology

The mission of the WFN is to foster quality neurology and brain health worldwide

WFN Specialty Groups

- Aphasia, Dementia and Cognitive Disorders
- Autonomic Disorders
- Coma and Disorders of Consciousness
- Environmental Neurology
- History of the Neurosciences
- Migrant Neurology
- Motor Neuron Diseases
- Neuro-Oncology
- Neuroepidemiology
- Neuroethics
- Neuroimaging
- Neuromuscular Disorders
- Neurosonology
- Palliative Care
- Rare Neurological Diseases
- Tropical and Geographical Neurology

Regional Associations

- African Academy of Neurology (AFAN)
- American Academy of Neurology (AAN)
- Asian and Oceanian Association of Neurology (AOAN)
- European Academy of Neurology (EAN)
- Pan American Federation of Neurology (PAFNS)
- Pan Arab Union of Neurology (PAUNS)

United Nations
Economic and Social Council (ECOSOC)

The WFN has a Special consultative status at ECOSOC

World Health Organization

The WFN is a Non-State Actor of the WHO

Adapted from the slide by Prof. W.Grisold

WFN 124 Member societies

Courtesy Prof. Wolfgang Grisolod

Members

Northern Africa

- Algeria
- Egypt
- Libya
- Morocco
- South Sudan
- Sudan
- Tunisia
- Western Sahara

Southern Africa

- Botswana
- Eswatini
- Lesotho
- Namibia
- South Africa

Western Africa

- Benin
- Burkina Faso
- Cape Verde
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Ivory Coast
- Liberia
- Mali
- Mauritania
- Niger
- Nigeria
- Saint Helena, A
  Tristan da Cunh
- Senegal
- Sierra Leone
- Togo

Eastern Africa

- Somalia
- Tanzania
- Uganda
- Zambia
- Zimbabwe

Central Africa

Northern Africa

- Algeria
- Egypt
- Libya
- Morocco
- South Sudan
- Sudan
- Tunisia
- Western Sahara

Southern Africa

- Botswana
- Eswatini
- Lesotho
- Namibia
- South Africa

Western Africa

- Benin
- Burkina Faso
- Cape Verde
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Ivory Coast
- Liberia
- Mali
- Mauritania
- Niger
- Nigeria
- Saint Helena, Ascension and Tristan da Cunha [1]
- Senegal
- Sierra Leone
- Togo

Eastern Africa

- British Indian Ocean Territory [1]
- Burundi
- Comoros
- Djibouti
- Eritrea
- Ethiopia
- Kenya
- Madagascar
- Malawi
- Mauritius
- Mayotte [1]
- Mozambique
- Reunion [1]
- Rwanda
- Seychelles
- Somalia
- Tanzania
- Uganda
- Zambia
- Zimbabwe

Central Africa

- Angola
- Cameroon
- Central African Republic
- Chad
- Democratic Republic of the Congo
- Equatorial Guinea
- Gabon
- Republic of the Congo
- Sao Tome and Principe

Courtesy Prof. Wolfgang Grisolod

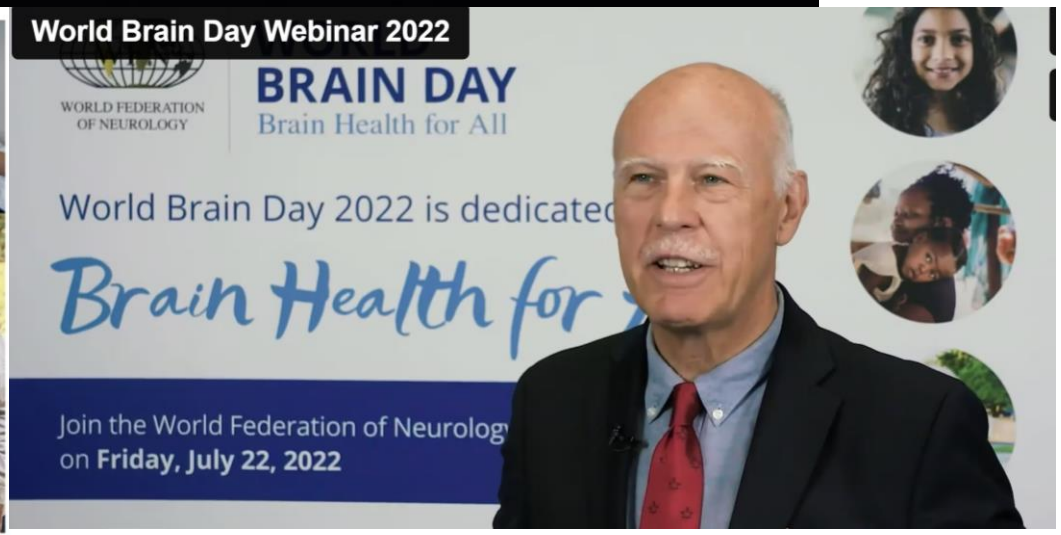
Brain Health

World Health Organization

- **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
- **Brain health conditions emerge throughout the life course** and are characterized by disruptions in normal brain growth and/or brain functioning. They may manifest as neurodevelopmental and neurological conditions such as intellectual developmental disorders, autism spectrum disorders, ***epilepsy, cerebral palsy, dementia, cerebrovascular disease, headache, multiple sclerosis, Parkinson's disease, neuroinfections, brain tumors, traumatic injury.***

WORLD FEDERATION OF NEUROLOGY

World Brain Day



July 22

Optimizing brain health across the life course:

WHO position paper

With this WHO position paper I am pleased to present a conceptual framework for optimizing brain health across the life course that will help us to raise awareness of the pressing need to establish brain health as a global priority. As such, this position paper represents an important tool for supporting the implementation of the new intersectoral global action plan. Let's not forget, optimizing brain health across the life course will improve health outcomes and well-being for all people in all corners of the world.

Advances in neuroscience and neuroimaging – in combination with other disciplines such as artificial intelligence, machine learning and data science – are drivers of research into the human brain, lifting multisectoral discourse and discovery to entirely new levels. This is a cause for great excitement and optimism.

However, if the factors that have a dire impact on brain health are left unaddressed, we shall fail both to promote everyone's full potential and to reduce the burden of neurological conditions, thereby impeding not only health but also social and economic development globally. We will achieve bold global commitments – such as the United Nations Sustainable Development Goals, WHO's Triple Billion targets and the recently-adopted Intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 – only if we work together to address brain health at all societal levels and across all sectors of society.

Dr REN Minghui
Assistant Director General
Universal Health Coverage/Communicable and Noncommunicable Diseases

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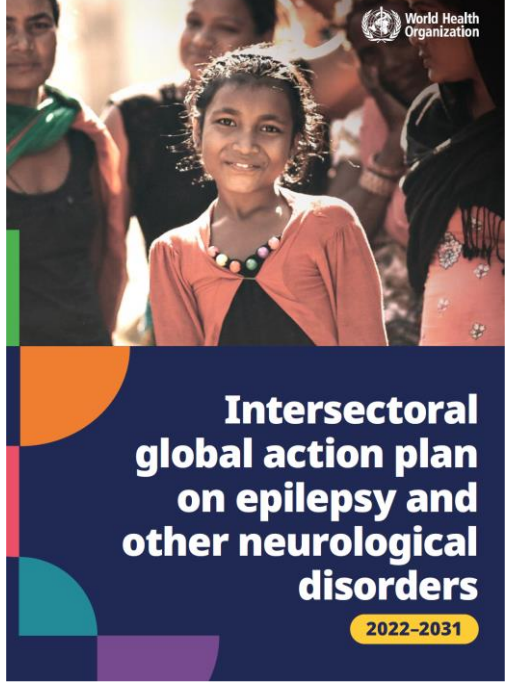
- Education

千里之行，始於足下 A journey of a thousand miles begins with a single step.

Lao Tzu (604–531 BC)



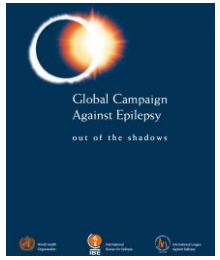
……. did not happen by chance, but came at the end of a long journey that involved the hard and tireless work of many dedicated individuals around the globe

From global campaign to global commitment: The World Health Assembly's Resolution on epilepsy

*Athanasios Covanis, †Alla Guekht, ‡Shichuo Li, §Mary Secco, ¶Raad Shakir, and **Emilio Perucca

Epilepsia, 56(11):1651–1657, 2015
doi: 10.1111/epi.13192

The ILAE/IBE/WHO Global Campaign against Epilepsy: Bringing Epilepsy "Out of the Shadows"



- Announced at the ILAE European Congress (The Hague, The Netherlands) and the ILAE and IBE Asian and Oceanic Congresses (Seoul, South Korea) in September 1996
- **Launched in Geneva on June 19, 1997, and in Dublin at the 22nd ILAE/IBE International Congress on July 3, 1997**

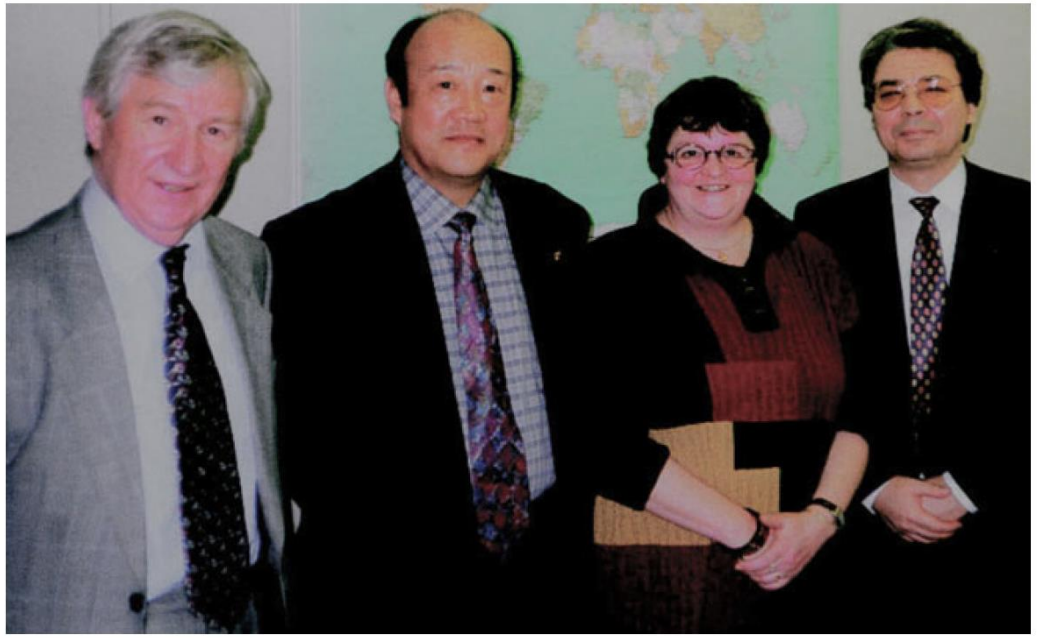
Prof. Edward H. Reynolds

"It occurred to me that a partnership between the professional (ILAE), the public/patients (IBE), and the political (WHO) could be a very powerful one for addressing the needs of people with a common, universal, hidden, neglected, and stigmatised brain disorder."

Hanneke De Boer

"Often epilepsy is not called by its name. For instance, in Africa, it is called the "burns disease," as a result of people falling into an open fire and not being helped for fear of their saliva contaminating others. For very similar reasons, in Asia it may be called "the drowning disease," and in the western world, "the hidden disease."

Epilepsia, 2002



Prof. Edward H. Reynolds (ILAE President,1993–1997)
Prof. Shichuo Li (Chairman of the WHO EB, 1996–1997)
Hanneke De Boer (IBE President, 1997–2001)
Leonid Prilipko (Director, Section on Neuroscience, Department of Mental Health, WHO 1996–2007)

World Health Organization

2015

WHA Resolution 68.20

SIXTY-EIGHTH WORLD HEALTH ASSEMBLY — WHA68.20

Agenda item 13.5 — 26 May 2015

Global burden of epilepsy and the need for coordinated action at the country level to address its health, social and public knowledge implications

The Sixty-eighth World Health Assembly,

Having considered the report by the Secretariat on the global burden of epilepsy and the need for coordinated action at the country level to address its health, social and public knowledge implications;[1]

43 countries made strong statements in favor of the Resolution with commitments to step up actions against epilepsy

19 countries requested to be named as co-sponsors of the Resolution

Table 1. Delegations that made official statements in support of the Resolution on The Global Burden of Epilepsy at the 136th WHO Executive Board meeting and/or at the 68th World Health Assembly. Countries shown in bold requested to co-sponsor the Resolution.

Albania	Lithuania
Argentina	**Malaysia**
Australia	**Maldives**
Azerbaijan	Malta
Bahrain	Nepal
Benin[a]	**Panama**
Brazil[b]	Poland
Canada	**People's Republic of China**
Chinese Taipei (observer)	Republic of Korea
Czech Republic	**Romania**
Democratic Republic of Congo[a]	**Russian Federation**
Egypt[c]	Saudi Arabia
Georgia	Suriname
Ghana	Swaziland
Greece	Tanzania
India	Thailand
Indonesia	Timor-Leste
Iraq[c]	**United Kingdom**
Islamic Republic of Iran	United States of America
Italy	Uruguay[d]
Japan	**Venezuela**
Lebanon	

[a] Also speaking on behalf of the 47 Members of the African Region.

[b] Also speaking on behalf of the 35 Member States of the Region of the Americas.

[c] Also speaking on behalf of the 21 Member States of the Eastern Mediterranean Region.

[d] Also speaking on behalf of the 12 Member States of Union of South American Nations

SIDE EVENT AT THE 72ND WORLD HEALTH ASSEMBLY

22ND MAY 2019

SAVE THE DATE!

Epilepsy: A Public Health Priority

Side event at the 72nd World Health Assembly
Date and time: Wednesday 22 May 2019, 12.30-14.00 ***Venue:*** Palais des Nations, Room XXIV

Co-hosted by:

the Russian Federation, China, Colombia, Croatia, Kazakhstan, Mexico, Slovenia, Tunisia and Zambia
with contributions from the ILAE, IBE and the WFN

Epilepsy affects over 50 million people worldwide. Among neurological diseases, it accounts for the highest disability life year rates and carries a high risk of premature mortality. Persons with epilepsy are stigmatized in all societies, with the consequences of prejudice and discrimination adding to the medical burden of the disease. Epilepsy affects people of all ages, genders, race and income levels, but poor populations and those living in vulnerable situations, in particular in low- and middle-income countries, bear a disproportionate burden, posing a threat to public health and economic and social development.

Epilepsy is the only severe and disabling neurological disease that is fully treatable in the majority of cases. About two thirds of persons with epilepsy achieve complete seizure control with inexpensive medications.

This side event will bring together policy makers, NGOs, patients, health care leaders and Member States to develop next steps for the implementation of WHA68.20. The Global Epilepsy Report will be presented and key directions of the Epilepsy Action Plan will be identified.

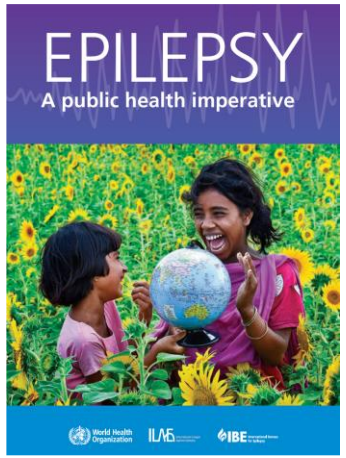
ILAE International League Against Epilepsy
IBE International Bureau for Epilepsy
WFN WORLD FEDERATION OF NEUROLOGY

Over 120 participants from 39 Member States across all 6 WHO regions

The application for the Side event, submitted by the Russian Federation, has been co-sponsored by Columbia, China, Croatia, Gyuana, Kazakhstan, Honduras, Mexico, Slovenia, Tunisia, Zambia.
From the Non-State Actors, ***the ILAE, IBE and the WFN*** *were official contributors*

- Highlighted **the immense burden of epilepsy.**
- It served as an **opportunity for scaling up of Member States' political commitment towards addressing the gaps in epilepsy care** and moving forward **with commitment to action** from the hosting countries and those in attendance.
- **The need for a Global Action Plan for Epilepsy was unanimously acknowledged**

WHO-ILAE-IBE Global Report on Epilepsy (2019)



- *This is the first global report on epilepsy produced by WHO and key partners. It highlights the available evidence* ***on the burden of epilepsy and the public health response required*** *at global, regional and national levels.*

  Dr Ren Minghui, WHO ADG

- ***It is time to highlight epilepsy as a public health imperative****, to strongly encourage investment in reducing its burden, and* ***to advocate for actions*** *to address gaps in epilepsy knowledge, care and research*

  Dr Dévora Kestel, Director of MH, WHO

EPILEPSY
A public health imperative

1. Global Burden of epilepsy
2. Leadership and governance for epilepsy
3. Comprehensive care response to epilepsy
4. Access to antiseizure medicines
5. The social response: Misconceptions and stigma in epilepsy
6. Prevention of epilepsy
7. Research on epilepsy
8. Way forward

The time to act is NOW.

Urgent actions are needed, and these include:

- **Promote** epilepsy as a public health priority to reduce its burden.
- **Improve** public attitudes, reduce stigma and promote protection of the rights of people with epilepsy.
- **Invest** in health and social care systems to improve accessibility to epilepsy care.
- **Enhance** access to cost-effective antiseizure medicines globally.
- **Prevent** acquired epilepsies through improved care for common causes, such as perinatal injury, central nervous system infections, stroke and traumatic brain injuries.
- **Increase** priority given to epilepsy in research agendas.

Received: 4 February 2021 | Accepted: 8 February 2021
DOI: 10.1111/epi.16856

Epilepsia

SPECIAL REPORT

The road to a World Health Organization global action plan on epilepsy and other neurological disorders

Alla Guekht[1,2,3] | Martin Brodie[4] | Mary Secco[5] | Shichuo Li[6] | Nancy Volkers[3] | Samuel Wiebe[3,7]

6 | TOWARD AN ACTION PLAN ON EPILEPSY AND OTHER NEUROLOGICAL DISORDERS: THE LONG AND WINDING ROAD

6.1 | January 2019: Positioning Epilepsy on the WHO Agenda

Following Resolution WHA 68.20, described above, it became clear to the ILAE and IBE that further actions would be required to make meaningful inroads in addressing the needs of people with epilepsy globally. The initial step would require including epilepsy as an item in the already-full agenda of the WHO Executive Board. In January 2019, epilepsy was taken up as a priority by the Russian Federation. At the 144th WHO Executive Board meeting, with support from Chile, China, Indonesia, and Jamaica, the proposal by the Russian Federation to include epilepsy in the agenda of the 146th Session of the WHO Executive Board was approved. This created a remarkable opportunity to advance our quest for an action plan on epilepsy.

6.3 | Fall 2019: Preparing to Make Our Case to the WHO Executive Board

The inclusion of the epilepsy item on the agenda of the 146th WHO Executive Board meeting and the success of the WHA side event made it clear that there was an opportunity to pursue the aim of articulating global actions for epilepsy. In preparation for the WHO Executive Board meeting, member chapters and associations of the ILAE and IBE around the world mobilized to garner support from their governments. This led to strong support from member states, including official letters to the WHO from Chile, Georgia, Honduras, Italy, Guyana, Ivory Coast, Kazakhstan, North Macedonia, and Tunisia. The leadership bodies of the American Epilepsy Society, US Epilepsy Foundation, Australian Epilepsy Society, Swiss League Against Epilepsy, Swedish Epilepsy Society, and Oman League Against Epilepsy received positive feedback from their respective governments.

146th WHO Executive Board meeting

World Health Organization

Epilepsy and other Neurological Disorders

EXECUTIVE BOARD
146th session
Agenda item 11

EB146(8)
6 February 2020

Epilepsy

The Executive Board, having considered the report on epilepsy,[1] and noting the highly treatable nature of epilepsy, for which urgent action is needed; the many outstanding gaps in the prevention and treatment of the condition; its frequent occurrence as a comorbidity of neurological disorders; and the potential for scaling up implementation of synergistic, proven cost-effective measures to reduce the burden of epilepsy and other neurological disorders, decided:

(1) to note the global report, *Epilepsy: a public health imperative*,[2] published in 2019;

(2) to encourage Member States to discuss a possible draft resolution on further action on epilepsy and other neurological disorders for consideration by the Seventy-third World Health Assembly;

(3) to request the Director-General:

(a) to expand the scope of the report to be submitted for consideration by the Seventy-third World Health Assembly, by adding a new section entitled "Synergies in addressing the burden of epilepsy and other neurological disorders;"

(b) to develop technical guidance on strengthening country actions against epilepsy and its comorbidities, and make this available on WHO's website.

Ninth meeting, 6 February 2020
EB146/SR/9

- ✓ The Decision was co-sponsored by 37 Member States
- ✓ Furthermore, support was expressed by over 80 countries

Epilepsy and other Neurological Disorders: COLLABORATION

World Health Organization

SEVENTY-THIRD WORLD HEALTH ASSEMBLY
Agenda item 11.6

A73/A/CONF./2
9 November 2020

Global Actions on epilepsy and other neurological disorders

Draft resolution proposed by Belarus, Bhutan, China, Colombia, Eswatini, the European Union and its Member States, Guyana, Iceland, Jamaica, Philippines, Russian Federation

WFN

About Education Resources Publications Membership

Promoting global neurological education and training

Resources News WFN News The Intersectoral Global Action Plan on Epilepsy and other Neurological Disorders Adopted at WHO's World Health Assembly

News

WFN News

Press Releases

The Intersectoral Global Action Plan on Epilepsy and other Neurological Disorders Adopted at WHO's World Health Assembly

27 May 2022

The International Child Neurology Association

promoting education & research in child neurology worldwide

https://icnapedia.org

William Carroll, WFN president, at the Executive Board session on Epilepsy, with Action Amos, vice president of IBE, and Prof. Samuel Wiebe, ILAE president.

WORLD NEUROLOGY

THE OFFICIAL NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

WFN and WHO Update

Resolution WHA 73.10 for the Development of an Intersectoral Global Action Plan (IGAP) on Epilepsy and Other Neurological Disorders. 2022 – 2031.

BY KIMBERLY KARLSHOEJ ON BEHALF OF ALLA GUEKHT, WOLFGANG GRISOLD, SAM WIEBE, HELEN CROSS, JULIE HALL, MARTIN BRODIE, MARY SECCO, JO WILMHURST, MICHAEL BRAININ, CLAUDIA TRENKWALDER, DAVID DODICK, AND BILL CARROLL

It was a landmark event when on Nov. 12, 2020, the WHO Executive Board accepted the recommendation of the World Health Assembly (WHA) to adopt Resolution WHA73.10. This resolution called for the development of an Intersectoral Global Action Plan (IGAP) to tackle epilepsy and other neurological disorders through comprehensive actions to detect, prevent, care, treat, and rehabilitate people with epilepsy and other neurological disorders, as well as ensuring their social, economic, educational, and inclusion needs

The WFN has long been involved with neurological activities with the WHO, which include a first edition of the Atlas: Country Resources for Neurological Disorders 2004, Neurological Disorders: Public Health Challenges 2006 and the second edition of the Atlas: Country Resources for Neurological Disorders 2017, to mention a few. The resolution to develop an IGAP is also momentous in that neurological disorders are overtly recognized by the WHO Member States in line with the Global Burden of Neurological Disorders (2018) finding of them being the leading cause of disability-adjusted-life-years and the second leading cause of death

The resolution is in large part due to the efforts of the International League Against Epilepsy (ILAE) and the International Bureau for Epilepsy (IBE) supported strongly by the WFN who, with several member states led by the Russian Ministry of Health, convinced the WHA that epilepsy was a public health emergency. In the lead up to Resolution WHA 73.10, member states recognized the burden of epilepsy and the synergies with many neurological conditions, especially access to both services and support for such conditions was insufficient, especially in low- and middle-income countries. The vote to address the problem with the call for the IGAP was unanimous. The WFN has a unique opportunity to contribute to the development of the IGAP.

As the first step, the WHO published a discussion paper. The WFN as a "non-state actor" (NSA) in official relations with WHO presented its comments on the draft discussion paper in both virtual and web-based consultations. To do this, the WFN first joined with the ILAE, IBE, and the International Child Neurology Association (ICNA) to formulate comments on epilepsy and other neurological disorders, both adult and children, to match the intent of the IGAP draft discussion paper.

Second, the WFN formed a separate group with members of the Global Neurology Alliance (GNA) to advocate a stronger voice for neurological conditions. This group was selected by WFN President William Carroll to reflect the conditions that contributed most to the Global Burden of Neurological Disorders. The group comprised immediate past presidents of the International Headache Society (IHS: David Dodick), World Stroke Organization (WSO: Michael Brainin) and the current President of the Parkinson's Disease and Movement Disorders Society (MDS: Claudia Trenkwalder) together with Alla Guekht, Wolfgang Grisold, and Kimberly Karlshoej from the WFN. Alla Guekht was indispensable in these meetings through her knowledge of the WHO. The WFN contributions to the

see UPDATE page 7

Scientific Theatre | Theatre08

ILAE: Global Actions on Epilepsy and Other Neurological Disorders

25.06.2022 | 13:30 - 14:00 | Scientific Theatre | 191 Views

This will session focus on the landmark Resolution of the 73 World Health Assembly (WHA) and the 10-years Intersectoral Action Plan for Epilepsy and other Neurological Disorders, which address the current significant gaps in prevention, early detection, care, treatment, and rehabilitation of persons and families living with epilepsy and other neurological disorders. Speakers will highlight the major achievement (WHO), the International League Against Epil focusing on epilepsy as an entry point can im only for people with epilepsy but also for thos

ean congress Europe 2022

8th Congress of the European Academy of Neurology

June 25 - 28 Vienna, Austria

EAN 2022 Scientific Theatre

10 year Intersectoral Global Actions on Epilepsy and Other Neurological Disorders: History and Expectations

Alla Guekht

25.06. | 13:30 - 13:45 | Scientific Theatre | 56 Views

EAN 2022 Scientific Theatre

Epilepsy: The Entry Point to Brain Health

Matthew C. Walker

75 WHA: IGAP unanimously approved

- 116 countries and many Non-State Actors spoke in favor
- Many Non-State Actors, including ILAE, WFN, IBE
- Excellent contribution of the WHO Secretariat/ Brain Health Unit in preparation of the IGAP

A75/10 Add.4

ANNEX 7

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

BACKGROUND

1. In November 2020, the Seventy-third World Health Assembly adopted resolution WHA73.10 requesting the Director-General of WHO, inter alia, to develop a 10-year intersectoral global action plan on epilepsy and other neurological disorders, in consultation with Member States, in order to promote and support a comprehensive, coordinated response across multiple sectors.

2. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 aims to improve access to care and treatment for people living with neurological disorders, while preventing new cases and promoting brain health and development across the life course. It seeks to support the recovery, well-being and participation of people living with neurological conditions, while reducing associated mortality, morbidity and disability, promoting human rights, and addressing stigma and discrimination through interdisciplinary and intersectoral approaches.

3. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 builds on previous global resolutions, decisions, reports and commitments, including resolution WHA68.20 on the global burden of epilepsy and the need for coordinated action at the country level to address its health, social and public knowledge implications. A number of preventive, pharmacological and psychosocial approaches are shared by epilepsy and other neurological disorders. This sharing of strategies and approaches (i.e., synergies) can serve as valuable entry points for accelerating and strengthening services and support for epilepsy and other neurological disorders.

OVERVIEW OF THE GLOBAL SITUATION

4. Disorders of the nervous system are the leading cause of DALYs and the second leading cause of death globally, accounting for 9 million deaths per year. The five largest contributors of neurological DALYs in 2016 were stroke (42.2%), migraine (16.3%), dementia (10.4%), meningitis (7.9%) and epilepsy (4.9%).[1] Globally in 2016, 52.9 million children younger than 5 years had developmental disabilities and 95% of these children lived in low- and middle-income countries.[2]

5. The high burden associated with neurological disorders is compounded by profound health inequities. For example, nearly 80% of the 50 million people with epilepsy live in low- and middle-income countries, where treatment gaps exceed 75% in most low-income countries and exceed 50% in most middle-income countries.[3] Disabilities associated with neurological conditions inordinately

OVERVIEW OF THE GLOBAL SITUATION

4. Disorders of the nervous system are the leading cause of DALYs and the second leading cause of death globally, accounting for 9 million deaths per year. The five largest contributors of neurological DALYs in 2016 were stroke (42.2%), migraine (16.3%), dementia (10.4%), meningitis (7.9%) and epilepsy (4.9%).[1] Globally in 2016, 52.9 million children younger than 5 years had developmental disabilities and 95% of these children lived in low- and middle-income countries.[2]

ILAE, IBE and WFN statements at the 150 WHO EB and 75 WHA

ILAE

IBE

WFN

World Health Organization

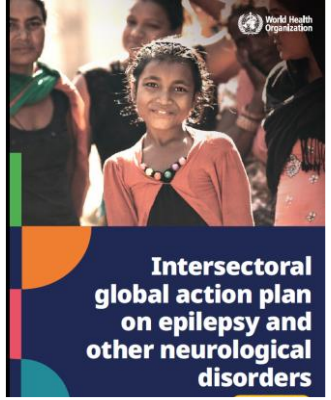
SEVENTY-FIFTH WORLD HEALTH ASSEMBLY
22–28 May 2022

Pillar 1: One billion more people benefiting from universal health coverage

14.1 Follow-up to the political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable diseases

(g) Draft intersectoral global action plan on epilepsy and other neurological disorders in support of universal health coverage

The Intersectoral Global Action Plan for Epilepsy and other Neurological Disorders



Vision

18. The vision of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 is a world in which:

- brain health is valued, promoted and protected across the life course;
- neurological disorders are prevented, diagnosed and treated, and premature mortality and morbidity are avoided; and
- people affected by neurological disorders and their carers attain the highest possible level of health, with equal rights, opportunities, respect and autonomy.

Goal

19. 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.

20. 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.

17. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 provides the vision, goal, guiding principles and strategic objectives with their action areas and targets. It suggests a range of proposed actions for Member States, the WHO Secretariat and international and national partners. While targets are defined for achievement globally, each Member State can be guided by these to set its own national targets, taking into account national circumstances and challenges.[12]

The Intersectoral Global Action Plan for Epilepsy and Other Neurological Disorders

- Proposed actions for Member States
- Actions for the Secretariat:
- Proposed actions for international and national partners

VISION

18. The vision of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 is a world in which:

16. Linking the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 with other global commitments reflects WHO's responsiveness to focusing on the impact on people's health and working in a cohesive and integrated manner).

17. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 provides the vision, goal, guiding principles and strategic objectives with their action areas and targets. It suggests a range of proposed actions for Member States, the WHO Secretariat and international and national partners. While targets are defined for achievement globally, each Member State can be guided by these to set its own national targets, taking into account national circumstances and challenges.

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.

20. 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.

The Intersectoral Global Action Plan for Epilepsy and other Neurological Disorders

Global targets for strategic objective 1

Global target 1.1

75% of countries will have adapted or updated existing national policies, strategies, plans or frameworks to include neurological disorders by 2031.

Global target 1.2

100% of countries will have at least one functioning awareness campaign or advocacy programme for neurological disorders by 2031.

1.1 Advocacy

28. Advocacy represents the first step in raising awareness and better public understanding of brain health and neurological disorders. It is necessary to improve neurological care, reduce stigma and discrimination, prevent violations and promote human rights. Advocacy also includes public and political awareness of the burden and impact of neurological disorders and the dissemination of evidence-based interventions, including the promotion of brain health and the prevention and treatment of neurological disorders.

29. Effective advocacy, including public awareness campaigns, requires tailoring approaches to reflect each country's cultural and social context. In addition, it requires involving people with neurological disorders in the centre of all advocacy efforts to achieve desired health and social outcomes. Public awareness campaigns should include information on the promotion and prevention of neurological disorders and should be designed for people living with neurological disorders.

The Intersectoral Global Action Plan for Epilepsy and other Neurological Disorders

Global targets for strategic objective 2

Global target 2.1

75% of countries will have included neurological disorders in the UHC benefits package by 2031.

Global target 2.2

80% of countries will provide the essential medicines and basic technologies required to manage neurological disorders in primary care by 2031.

2.1 Care pathways

48. Developing interdisciplinary care for peo with neurological disorders requires guidelines that are grounded in evidence based protocols and practices, organizat by stages of care and a life course appro

49. Services and care pathways, including access to quality emergency care, should be responsive to the needs of people with neurological disorders, their carers and families, who live in both urban and rural areas, and should be inclusive of vulnerable population groups, including socioeconomically disadvantaged individuals, children, older people, peopl affected by domestic and gender-based violence, prisoners, refugees, displaced populations and migrants, indigenous populations and other groups specific to each national context.

2.2 Medicines, diagnostics and other health products

58. Medicines, diagnostics and other health products, such as assistive technology, biological products, and cell and gene therapy, are essential for prevention, early diagnosis and treatment to reduce mortality and morbidity and improve the quality of life of people with neurological disorders.

59. Essential medicines have a crucial role for both the prevention and treatment of neurological disorders. For example, medicines for multiple sclerosis exist that slow disease progression and improve the quality of life for many people, but their availability and affordability are limited in low- and middle-income countries.

60. The use of medical devices, including imaging and in vitro diagnostics (e.g., neuroimaging, lumbar puncture and microscopy) can reduce morbidity through early detection and by slowing disease progression. Even when effective diagnostic tools are available, they may not be affordable or accessible due to the limited availability of laboratory infrastructure, equipment and trained personnel.

61. Assistive technology enables people to live healthy, productive, independent and dignified lives and reduce the need for formal health and support services, long-term care and the work of carers. Few people in need have access to assistive products due

2.3 Health workers' capacity-building, training and support

66. Achieving improved health outcomes depends greatly on the combination of an adequate neurological workforce (e.g., adult neurologists, child neurologists, neurosurgeons); other health care providers, including but not limited to psychologists, psychiatrists, radiologists, physical therapists, occupational therapists and speech therapists; and competent health workers serving at the PHC level who are trained in identifying and managing neurological disorders.

67. The training and education of an interdisciplinary workforce, including social care workers, rehabilitation specialists trained in neurological conditions, technicians (electrophysiological, imaging, laboratory), pharmacists, biomedical engineers, community health workers, family, carers and traditional healers, where appropriate, is required to support the delivery of person-centred care to people with neurological disorders, reduce their mortality and morbidity and improve their quality of life.

The Intersectoral Global Action Plan for Epilepsy and other Neurological Disorders

Global targets for strategic objective 3

Global target 3.1

80% of countries will have at least one functioning intersectoral programme for brain health promotion and the prevention of neurological disorders across the life course by 2031.

Global target 3.2

The global targets relevant for prevention of neurological disorders are achieved, as defined in:

- the NCD-GAP;
- Defeating meningitis by 2030: a global road map; and
- Every newborn: an action plan to end preventable deaths.

3.1 Promoting healthy behaviour across the life course

82. Promoting and emphasizing brain health across the life course includes focusing on healthy behaviour. There are strong interrelationships between several neurological disorders, such as dementia and stroke, with NCDs such as hypertension, diabetes, obesity and other related disorders as well as with behavioural
physical inactivity, unbalanc
use and the harmful use of

83. An understanding of the ris
contributing to the neurolo
disease can inform preventi
lead to the development of
modifying strategies.

84. Smoking is a behavioural ris
associated with neurologica
as stroke, dementia and mu
Second-hand tobacco smok
to account for 4% of the global stroke burden in 2010.[3]

85. The harmful use of alcohol, such as heavy alcohol consumption, can directly affect the nervous system and result in neurological disorders such as cerebellar degeneration,

3.2 Infectious disease control

91. The neurological consequences of infectious diseases such as meningitis, encephalitis, neurocysticercosis, malaria, HIV, toxoplasmosis, polio, enterovirus, syphilis and rabies contribute to global morbidity and mortality, especially among the most vulnerable, marginalized populations and can result in lifelong consequences (e.g., vision and hearing loss, developmental delay, cognitive or motor impairment) that necessitate specialized follow-up care, including rehabilitation. Yet, many of these neurological consequences are preventable through immunization programmes and infectious disease control.

92. The emergence of neurotropic zoonotic infections can be attributed to several causes, including unsustainable agricultural intensification and the increased use and exploitation of wildlife[5]

93. Despite advances in global infectious disease control, epidemic infections such as Zika and SARS-CoV-2 have underscored the importance of infectious disease control as a preventive measure for neurological disorders. For example, the COVID-19 pandemic is expected to impact brain health across the life course, with a wide spectrum of associated neurological manifestations in the acute and post-acute stages of illness.

3.3 Preventing head/spinal trauma and associated disabilities

97. Traumatic brain and spinal cord injury require complicated and costly medical care. In 2016, there were 27 million new cases of traumatic brain injury and close to 1 million new cases of spinal cord injury globally.[7] Road traffic injuries and falls constitute the highest number of new cases of traumatic brain injury, while other causes such as child abuse and intimate partner violence and sports injuries are also preventable.

98. Each year, 37 million falls are severe enough to require medical attention and mostly affect adults aged 60 years and older, particularly

or fatigue; and inadequate enforcement of traffic laws.

100. Many sport-related injuries can also result in traumatic brain and spinal cord injury. Repetitive mild head trauma is associated with chronic traumatic encephalopathy and increases dementia risk. Awareness, laws and policies to educate sports professionals, parents and athletes and the implementation of helmet or protective devices policies are needed to prevent some cases of traumatic brain and spinal cord injury.

3.5 Promotion of optimal brain development in children and adolescents

112. The early stages of life, including the fetal stage and birth, present a particularly important opportunity to promote brain health and prevent neurological disorders that can have lifelong consequences as a child's brain develops and adapts rapidly in response to the surrounding environment, nutrition and stimulation.

113. Optimizing brain development in the formative stages involves creating conditions for nurturing care[17] and family and parenting support through public policies, programmes and services. These enable communities and caregivers to attend to children's good health, nutrition

health, substance use, congenital infections (such as TORCH syndrome – toxoplasmosis, rubella, cytomegalovirus, herpes simplex) or birth complications can have a negative impact on the developing brain and carry lifelong implications for brain health.

115. Certain environmental pollutants are specifically known to affect neurodevelopment. These include air pollution, heavy metals in soil and water, lead in household paint, mercury in seafood and workplace exposure and pesticides.[18] Young children are especially vulnerable to lead toxicity and even low levels of exposure can result in reduced attention

3.4 Reducing environmental risks

105. Exposure to environmental and occupational hazards can directly influence brain health. For example, in 2019 approximately 5% of the global stroke burden (in DALYs) was attributable to ambient air pollution[10].Across the world, vulnerable communities are subject to greater exposure to environmental toxins due to the conditions in which they work and live.

106. Toxin-induced encephalopathies, including exposure to heavy metals such as lead[11], mercury and air pollutants (e.g., carbon monoxide) can cause serious health and nervous system damage in all age groups.[12]

107. Parkinson's disease has been associated with exposure to pesticides in occupational and non- occupational settings[13]. In addition, migraines can be triggered by environmental pollutants such as bright lights, poor air quality and noise[14].

108. Climate change is one of several concurrent global environmental changes that simultaneously affect human health and neurological conditions, often in an interactive manner. For example, the transmission of vector-borne neurotropic viruses such as Zika, Japanese encephalitis and West Nile disease is jointly affected by climatic conditions, population movement, deforestation, land-use patterns, biodiversity losses, freshwater surface configurations and human population density.[15]

The Intersectoral Global Action Plan for Epilepsy and other Neurological Disorders

1. Raise policy prioritization and strengthen governance
2. Provide effective, timely and responsive diagnosis, treatment and care
3. Implement strategies for promotion and prevention
4. Foster research and innovation and strengthen information systems
5. Strengthen the public health approach to epilepsy

Strategic objective 4: Foster research and innovation and strengthen information systems

Global targets for strategic objective 4

Global target 4.1

80% of countries routinely collect and report on a core set of indicators for neurological disorders through their national health data and information systems at least every three years by 2031.

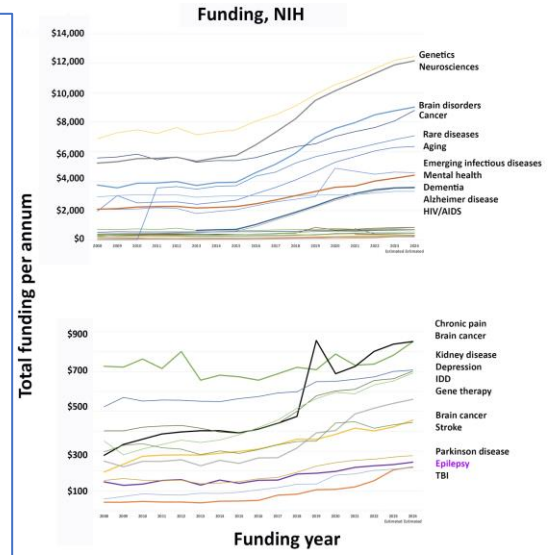
Global target 4.2

The output of global research on neurological disorders doubles by 2031.

4.1 Investment in research

126. If the incidence of neurological disorders is to be reduced and the lives of people with neurological disorders are to be improved, sustained investment in biomedical, clinical, implementation and translational research is crucial to inform prevention, diagnosis, treatment and care and create the potential to cure more neurological disorders.

127. All research and innovation activities for neurological disorders must be rooted in equity, diversity and inclusiveness, with increased engagement of people with neurological disorders.



https://report.nih.gov/funding/categorical-spending#/

Courtesy: Aristea Galanopoulou

4.2 Data and information systems

133. The availability of health and social care data on neurological disorders can support the identification of gaps in service delivery, improve the accessibility to and coordination of care for people with neurological disorders and promote better understanding and detection of population-level changes and trends.

134. Information systems for neurological disorders are often rudimentary or absent, especially in low-income countries, which complicates data acquisition on the availability and utilization of neurological services and the needs of people with neurological disorders and their carers.

135. The systematic integration of data collection into population-level and routine health information systems and the regular monitoring of neurological disorders based on a core set of measures forms the basis of evidence-based actions to improve services and measure progress towards implementing national programmes for neurological disorders and brain health.

The Intersectoral Global Action Plan for Epilepsy and other Neurological Disorders

Global targets for strategic objective 5

Global target 5.1

By 2031, countries will have increased service coverage for epilepsy by 50% from the current coverage in 2021.

Global target 5.2

80% of countries will have developed or updated their legislation with a view to promoting and protecting the human rights of people with epilepsy by 2031.

5.1 Access to services for epilepsy

143. Epilepsy is a highly treatable condition and more than 70% of people with epilepsy could live seizure-free lives if they had access to appropriate anti-seizure treatment, the most cost-effective of which are included in the WHO Model List of Essential Medicines. Despite this, the current treatment gap for epilepsy is estimated at 75% in low-income countries and is substantially higher in rural than in urban areas.[1]

144. Wide treatment gaps may result from a combination of decreased capacity in health care systems, the inequitable distribution of resources and the low priority assigned

to epilepsy care. Factors that widen this gap

145.

5.2 Engagement and support for people with epilepsy

149. People with epilepsy and their families across all resource settings are subjected to stigmatization and discrimination as a result of the misconceptions and negative attitudes that surround epilepsy, including the belief that epilepsy is the result of possession by evil spirits or that it is contagious.

150. Stigmatization leads to human rights violations and social exclusion. In some settings, children with epilepsy may not be allowed to attend school, while adults with the condition may not be able to find suitable employment or to marry.

151. Innovative strategies are needed to strengthen international efforts and national leadership to support policies and laws for people living with epilepsy, improve public attitudes and reduce stigma, while fully respecting the human rights of people living with epilepsy.

152. People with epilepsy, their carers and organizations that represent them should be empowered and involved in advocacy, policy, planning, legislation, service provision, monitoring and research in epilepsy.

2022
2031

Interse
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on epileps
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Strategic objectives

21. The intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 has the following strategic objectives:

1. Raise policy prioritization and strengthen governance
2. Provide effective, timely and responsive diagnosis, treatment and care
3. Implement strategies for promotion and prevention

Improving the lives of people with epilepsy:

a technical brief

Vision

18. The vision of the intersectoral global action plan on epilepsy and other neurological disorders 2022–2031 is a world in which:

- brain health is valued, promoted and protected across the life course;
- neurological disorders are prevented, diagnosed and treated, and premature mortality and morbidity are avoided; and
- people affected by neurological disorders and their carers attain the highest possible level of health, with equal rights, opportunities, respect and autonomy.

Goal

19. 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.

20. 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.

Table 1: List of global targets

1	1.1 75% of countries will have adapted or updated existing national policies, strategies, plans or frameworks to include neurological disorders by 2031.
	1.2 100% of countries will have at least one functioning awareness campaign or advocacy programme for neurological disorders by 2031.
2	2.1 75% of countries will have included neurological disorders in the UHC benefits package by 2031.
	2.2 80% of countries will provide the essential medicines and basic technologies required to manage neurological disorders in primary care by 2031.
3	3.1 80% of countries will have at least one functioning intersectoral programme for brain health promotion and the prevention of neurological disorders across the life course by 2031.
	3.2 The global targets relevant for prevention of neurological disorders are achieved, as defined in: • the NCD-GAP; • Defeating meningitis by 2030: a global road map; and • Every newborn: an action plan to end preventable deaths.
4	4.1 80% of countries routinely collect and report on a core set of indicators for neurological disorders through their national health data and information systems at least every three years by 2031.
	4.2 The output of global research on neurological disorders doubles by 2031.
5	5.1 By 2031, countries will have increased service coverage for epilepsy by 50% from the current coverage in 2021.
	5.2 80% of countries will have developed or updated their legislation with a view to promoting and protecting the human rights of people with epilepsy by 2031.

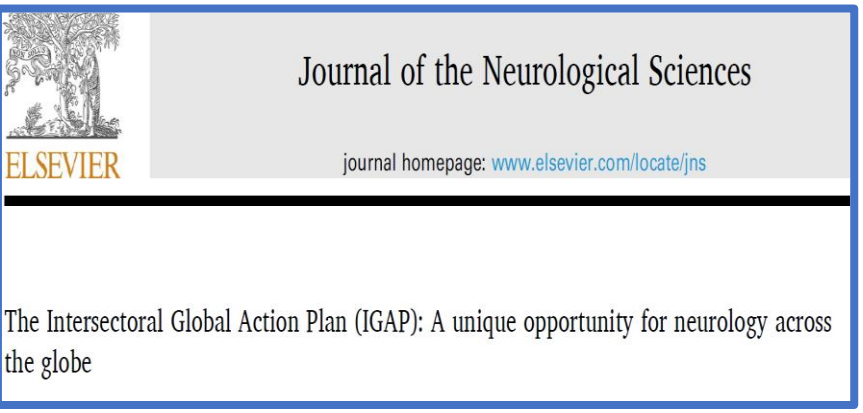
Annex 2:

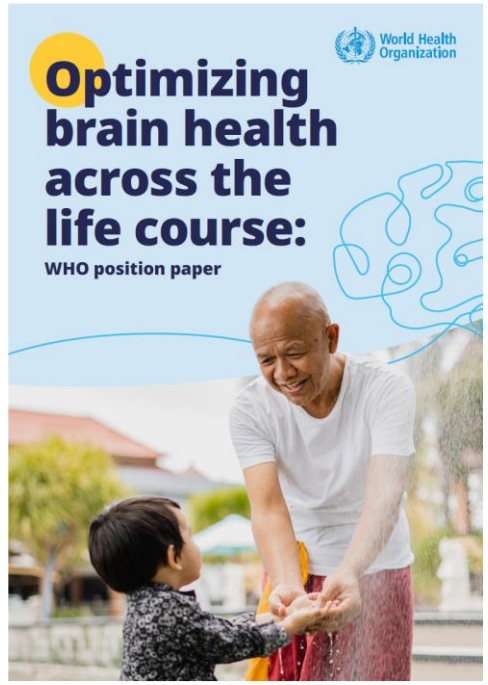
Indicators for measuring progress towards defined targets of the Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders 2022 – 2031

1. The indicators for assessing progress towards meeting the global targets of the Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders 2022 – 2031 represent a subset of the information and the reporting needs that Member States require to adequately monitor their policies and programmes for neurological disorders. Given that targets are voluntary and global, Member States are not necessarily expected to achieve all the specific targets individually but can contribute to a varying extent towards reaching them jointly.
2. The global targets established for each strategic objective provide the basis for measurable collective action and progress by Member States towards global goals and should not negate the setting of more ambitious national targets, particularly for those countries that have already reached global ones.
3. As indicated under Strategic Objective 4 of the plan, the Secretariat will provide guidance, training and technical assistance to Member States, upon request, for the development of national information systems to capture data on indicators of neurological health system inputs, activities and outcomes. The aim is to keep building on existing information rather than creating new or parallel systems. Existing monitoring and accountability mechanisms for mental health, noncommunicable diseases and infectious diseases will be drawn upon to measure the relevant targets and indicators of the Intersectoral global action plan on epilepsy and other neurological disorders 2022 – 2031.
4. The term "neurological disorders" is used to denote conditions of the central and peripheral nervous systems that include epilepsy, headache disorders, neurodegenerative disorders, cerebrovascular diseases, neuroinfectious/neuroimmunological disorders, neuromuscular disorders, neurodevelopmental disorders, traumatic brain and spinal cord injuries and cancers of the nervous system. The neurological disorders which cause the greatest disability globally are stroke, migraine, dementia, meningitis and epilepsy.
5. Epilepsy can serve as an entry point for accelerating the strengthening of services including information systems for other neurological disorders.

Intersectoral Global Action Plan for epilepsy and other neurological disorders

2022-2031





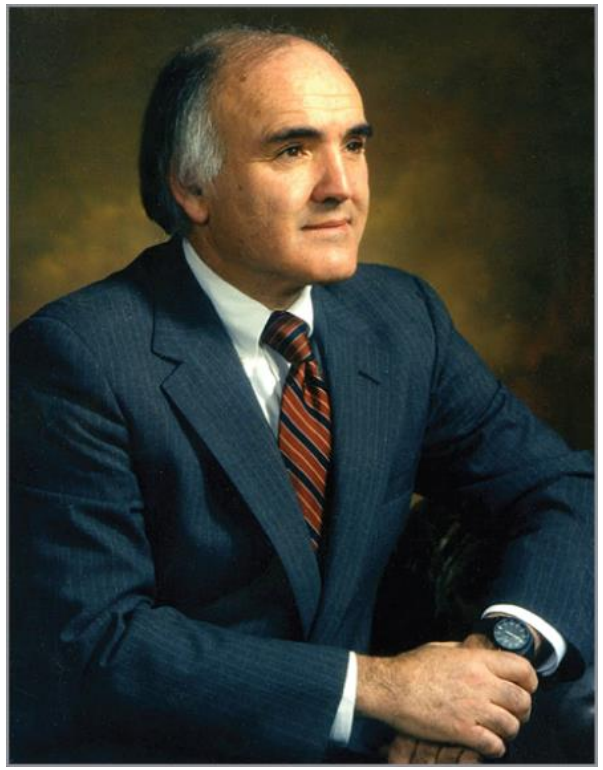
IGAP Implementation: a priority

WFN: Education

WORLD FEDERATION OF NEUROLOGY

The mission of the WFN, as a UK registered charity, is to foster quality neurology and brain health worldwide, a goal we seek to achieve by promoting global neurological education and training, with the emphasis placed firmly on under-resourced parts of the world.

- Educational programs
- Training Centers, Department visits
- JTFs, Congress bursaries
- Grants
- Educational Days
- Continuum
- Awards: T. Munsat



Professor Theodore Leon Munsat, MD (1930-2013)
WFN Trustee, Chair of the Education Committee
Co-founder of Continuum

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https://wfneurology.org/education

WORLD FEDERATION

Training Centres	Department Visits
Education Days	Grants & Awards
World Congress of Neurology	World Brain Day

AAN-WFN Continuum Education Programme

The American Academy of Neurology, along with its publisher, Wolters Kluwer, generously donate print issues of and online access to *Continuum: Lifelong Learning in Neurology* for neurology education in countries with limited resources. More than 40 countries currently participate in this collaboration, and eligibility is based on country income.

Wolters Kluwer

Education coordinators, who are appointed by their local neurologic societies, are responsible for the organisation of the programme in their countries. Coordinator-led discussions groups give participants an opportunity to engage with their peers and reinforce information learned through *Continuum* to enhance their clinical practices. The progress of these programmes are monitored by the World Federation of Neurology (WFN) through participant evaluations, and all programmes are expected to submit these evaluations in order to continue participating in the programme.

WFN Training Centres

The WFN`s mission is to teach and facilitate delivery of neurology health care worldwide. This mission includes liaising with neurological departments to ensure that a high standard of training is provided, which is appropriate for the area in which it is located.

2024 Applications

WFN Teaching Centre - Mohamed V University, Rabat
4-Year Residency Programme

Deadline 23rd February 2024

More information

THE GLOBAL HEALTH NETWORK
Enabling research by sharing knowledge

Brain Health Clinical Exchange

WFN
WORLD FEDERATION OF NEUROLOGY

Opportunities in Global Brain Health with the World Federation of Neurology

Thank you for your kind attention

Do you know about IGAP

- No
- Yes, I heard about it
- Yes, we (my country//region) are implementing IGAP

Do you know about WFN Educational programs?

- No
- Heard something
- Yes I (my team) participated
- Plan to participate