

## INTEGRATED RESPONSE TO NEUROLOGY

Report from the OneNeurology Virtual Roundtable with the World Health Organization, Member States and OneNeurology Partnership.

12 November 2021

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The event was attended by more than 60 participants.

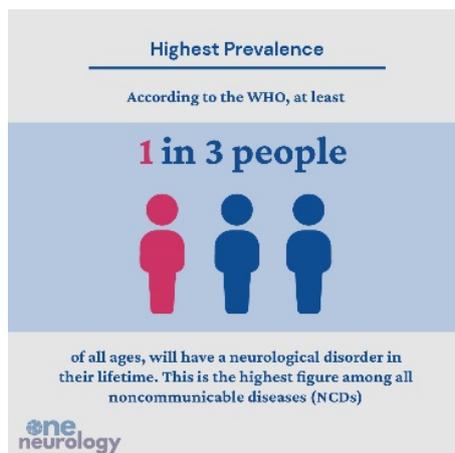
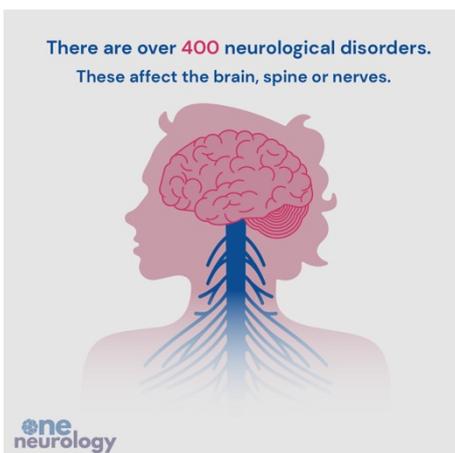
The Global Action Plan on epilepsy and other neurological disorders [GAP] is gaining policy momentum in the run-up to adoption by the World Health Assembly in May 2022. In this connection, the OneNeurology Roundtable explored the theme of integrated response to neurology in a life course perspective and within healthcare systems. Participants discussed what an integrated response to neurology should look like and the challenges and opportunities of building an integrated response at country level.

## Time to Act: Global Burden of Neurological Disorders

In a video presentation, the global burden of neurological disorders was highlighted as the leading cause of disability-adjusted life years and the second leading cause of death. With every 1 in 3 persons expected to be affected and with the cost of neurological disorders rising year by year, **the time to act is now...**

...And in acting together, we must aim to get neurological disorders recognised as a huge burden on society, we must collectively increase public awareness that there are over 400 neurological disorders and that these diseases and their treatment and care are connected because the brain, spine and nerves are connected. This is the OneNeurology message.

The [OneNeurology Partnership](#) is about demonstrating what makes neurological conditions one and what it means to address them together in a patient-centric perspective.



## The Global Action Plan on epilepsy and other neurological disorders

Dr. Neerja Chowdhary, Brain Health Unit, WHO, drew attention to the inadequate levels of prevention, diagnosis, treatment and care and the continuing stigma of neurological disorders. She presented the GAP as a unique opportunity, to build worldwide, with all relevant stakeholders, an integrated response to neurology across the life course and within healthcare systems to improve lives of people living with neurological disorders. Dr. Chowdhary welcomed the positive feedback on the draft and informed on the on-going procedure in taking it forward to the World Health Assembly in May 2022.

Tadeusz Hawrot, speaking on behalf of OneNeurology, asserted the Partnership’s support for an integrated approach for common solutions. He also stressed the importance of National Neurological Plans as critical vehicles for grassroots implementation of the GAP, elaborating that these plans may be standalone neurological or brain health plans or broader in scope covering a number of neurological diseases whilst including and contributing to targets set in the GAP.

Access to services and support including essential cost-effective medicines for neurological disorders is insufficient, especially in low- and middle-income countries.

1 in 10 people with dementia in low-income countries (LICs) receive a diagnosis

1 in 4 people in with epilepsy in LICs receive treatment

1 LIC had warfarin available for stroke prevention in comparison with 73% of high-income countries\*

1 in 3 countries globally have Levodopa/carbidopa for Parkinson’s disease at the primary health care level. (3% in AFRO, 0% in SEARO)\*

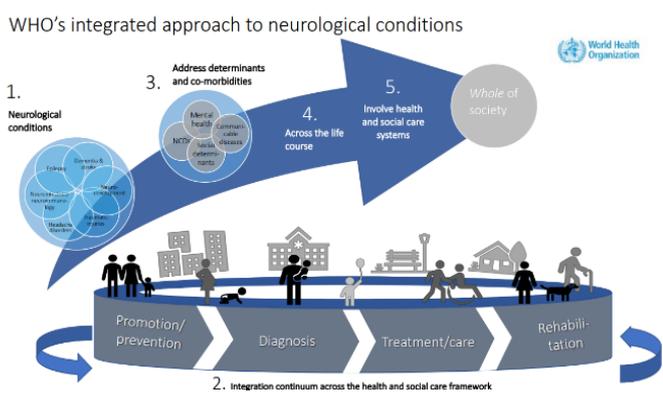
The global distribution of the neurological workforce is grossly uneven: 7.1/100K population in HIC, 0.1/100K population in LIC\*

Lack of knowledge, stigmatization and discrimination hinder presentation to health care facilities for initial or follow-up assessments.

\*Source: WHO Neurology Atlas, 2017.

## Integrated response to neurology across the life course and within healthcare systems

Session moderated by Vinny Smith, Chief Executive Officer, Confederation of Meningitis Organisation



Dr. Tarun Dua, Head of Brain Health Unit, WHO, set the stage for the discussion in this panel by presenting the different dimensions that integrated response shall cover for a ‘whole of society’ benefit. She explained that in a first-dimension integration across neurological diseases is needed to identify and better understand shared risk factors and treatment modalities. This sets the basis for a second dimension of integration across the continuum of health and social care, including various stakeholders such as for instance, those in the education and employment sectors. This paves the path for integration of services and will allow determinants and co-morbidities to be addressed

together in a third dimension that brings together Non-communicable diseases, Communicable diseases, Mental Health and Social determinants. Dr. Dua then went on to emphasise the 4<sup>th</sup> dimension that works across the life course and should already start in early childhood. Giving dementia as an example, she stressed that preventive strategies may be implemented earlier than waiting until the age of 65. In WHO’s integrated approach to neurological conditions, the last dimension sees the bridging of health and social care systems.

Dr. Dua then went on to make a case to turn challenges into opportunities for building an integrated response. She asked that an absence of a discourse on, and lack of resources and prioritisation of, neurological conditions be utilised as entry points to strengthen services. In doing this, she promoted primary health care approaches for neurology versus management of neurological conditions as being only under the purview of neurologists.

The following panel discussion engaged Professor Thomas Berger, Medical University of Vienna, Professor Elena Moro, CHU Grenoble and Professor Matilde Leonardi, Catholic University Milan. Prof. Berger viewed the GAP as an opportunity to develop a common understanding of integrated response, not only from an academic perspective but also

for a re-thinking of scientific approaches. In this connection, he referenced the concept of the general neurologist as a gate keeper, capable of pulling together existing treatment and care programmes, developing synergies between them and aligning them where necessary. Prof. Berger, as well as his fellow panellists, who represent the European Academy of Neurology, stated that the scientific panels of the academy which cover neurological specialties and sub-specialties, are well-positioned to advocate for, share good practice, facilitate peer learning and develop resources on integrated response for neurology within Europe and beyond. Professor Elena Moro added that the opportunity presented by the GAP will be timely in bringing together progress in biomarker identification, new digital technologies, advances in precision medicine and in developing guidelines for an effective implementation of integrated response for neurology using systems already in place. In parallel, she raised awareness on the shortage of neurologists in several countries and the need to utilise GAP for the promotion of interdisciplinary education and training of more young neurologists to help them put integrated response into practice. Prof. Moro and Prof. Leonardi, the third speaker in the panel, agreed on the need for health professionals and empowered patients to work together, united in the slogan – One body, One mind, One brain. Prof. Leonardi followed suit stating that now is the time to hit home the message of integrated response. She described the neurology landscape as one with many entry points with each country free to decide on what this entry point should be depending on the context in question. However, she reminded the audience that the integrated response should be built with the patient in focus, catering to healthcare and social care needs of the patient and family. She encouraged advocacy and the need to collaborate as one community, speaking with a OneNeurology voice.

In concluding this panel discussion, Dr. Tarun Dua appealed for a whole of community approach - all of neurology – to advocate for a paradigm shift that requires clinical neurologists to become public health neurologists. She was supported by Prof. Wolfgang Grisold, incoming president of the World Federation of Neurology who signalled his society's willingness to cooperate and push for neurology, engaging patients, neurologists, care workers and beyond to policy makers.

## Building integrated response at country level

Session moderated by Alexandra Heumber Perry, OneNeurology Partnership

### WHO support to Member States

Dr. Neerja Chowdhary, Technical Officer, Brain Health Unit, in the Department of Mental Health and Substance Use, WHO, Geneva, delivered a clear message that WHO would serve as a knowledge and evidence platform to facilitate peer learning and capacity building on planning and implementing the GAP, as well as making available norms, tools, evidence-based guidelines, compiling lists of approved drugs, helping countries to improve access to medicines and diagnostics and in strengthening health information systems. She called on member states to start engaging with all relevant stakeholders to strengthen advocacy and for integration across policies, legislation, health authorities and other necessary ministries, budgets and funding resources.

### Presentations of case-studies on challenges and opportunities

**GUYANA** Dr. Lachmie Lall, Ministry of Health, Guyana, stressed the importance of a plan that may be implemented in a low resource setting, stating that she sees most effective implementation taking place at primary health care levels as tertiary level care increases costs. She, therefore, wanted more emphasis on prevention and promotion. Her government is preparing a priority list of neurological conditions based on incidence and morbidity. Guyana is also working to link the ministry of health with NGOs, the ministry of social development, rehabilitation services and even traditional healers where standard official governmental health care is lacking.

**PHILIPPINES** In the Philippines, neurological disorders are included in the Mental Health Act through which mental, psychiatric and neurological services are coordinated. Ms. Frances Prescilla Cuevas, who represented the government, said that the country recently launched an investment case which found that epilepsy as an entry point would be cost-effective. The GAP, is therefore, very timely and will be used by the authorities to frame laws and strategies.

**NORWAY** is the only country that has a Brain Health Strategy in place, as reported by Ms. Cathrine Dammen, Counsellor Health Issues, Permanent Mission of Norway, Geneva. The strategy will serve to strengthen prevention and primary health care services for neurological and mental health disorders. The importance of advocacy in implementing the strategy was identified and for this cause, patient, medical and professional associations are unified in their efforts to push forward and help the health authorities in implementing the strategy. Norway supports GAP and would like to see a successful adoption as the country sees GAP as a guide to implementing the national strategy. Norway is carefully considering the balance between prevention and primary care as tertiary care is a high cost driver. Taking this into consideration, the Norwegian Brain Health Strategy will be used to better finance an integrated approach and a focus on prevention and primary health care. Ms. Dammen extended her country's openness to sharing and learning from others.

**INDIA** Dr. Bindu Menon, Apollo Speciality Hospitals, Nellore India & Secretary, Dr. Bindu Menon Foundation, expressed her concern on an increasing burden of neurological disorders in her country without a proportional increase in the neurological workforce, especially in the number of general neurologists who can play the role of gate keeper. Furthermore, she raised attention to the rural and urban divide which sees a lack of care availability and at the same time underutilisation of neurological care services. Dr. Menon was optimistic that the GAP would help to refocus the health policies to prioritise neurological disorders and coordinate implementation. For her country, she indicated that epilepsy as entry point is good because of proven cost effectiveness. This will allow targeting of multiple co-morbidities. She added that implementation at the country level and at regional levels will require differential prioritisation. However, she sees an integrated workforce starting already at primary care with a focus on prevention as crucial for further upstream impact on detection, and diagnosis. Dr. Menon concluded that a conceptualisation of this new integrated approach will require new methodologies, rethinking and new partnering.

**TUNISIA** Prof. Riadh Gouider, Head of Neurology Department, Razi Hospital La Manouba, Tunisia, expressed the situation in his country where neurological disorders are associated with maternal and child health as well as adults and ageing. This spectrum requires a change of perception that has to work transversally from political levels to civil society integrating brain and mental health and integrating neurologists just as much as other specialists such as cardiologists. He pointed to the example of Alzheimer's Disease which since 2015 has not seen progress because policy makers deem it as resource heavy without returns. Prof. Gouider said that it is important to turn this into opportunity by using the GAP and pulling together decision makers and informing them of socio-economic and health benefits.

## Cost-effective measures that can be scaled-up across neurological disorders

Vinciane Quoidbach, Public Health and Policy, research Project Manager, European Brain Council (EBC) - stated that Brain disorders are increasingly recognized as major causes of disability and death worldwide. In Europe, as many as 179 million are affected by brain disorders, at the economic cost of over 800 billion EUR per year. Cost-effective prevention and treatment solutions are key to help health systems and society cope.

In this respect, the EBC Value of Treatment (VOT) for Brain Disorders project aims to address the all-age burden of neurological diseases and identify best healthcare interventions in order to propose evidence-based policy recommendations on how to improve the care pathway. Case studies are analyzed in collaboration with clinicians, patients and health economists, applying empirical evidence from different European countries. Research links early intervention to measurable health gains such as improved survival rates, reduced complications and disability, better quality of life and lower treatment costs. However, as recently pointed out by the OECD and the European Commission, effective implementation of early diagnosis and treatment varies widely across health systems and many European countries are still lagging a long way behind, with wide clinical practice variations even within countries (health inequalities). More information on the EBC website: <https://www.braincouncil.eu/projects/the-value-of-treatment/>

As an illustration, the VOT-multiple-sclerosis (MS) economic case study analysis demonstrated the effectiveness/cost-effectiveness of both early treatment with disease modifying therapies and reducing MS risk factors (e.g. smoking and vitamin D insufficiency) from a healthcare and societal perspective across time-horizons and countries under study. It would be important to implement/scale-up such recommendations to reduce the burden in Europe and in other parts of the world. See scientific publication: <https://www.sciencedirect.com/science/article/abs/pii/S2211034821003746>

Another example under the current VOT study relates to autistic children. There are interventions such as pre-school autism communication interventions which are proven to be cost-effective. Research is ongoing, results will be released in 2022. In conclusion, studies are needed to build evidence on the economic cost of non-action, how to improve the efficiency of brain health and care pathways, prevent avoidable deaths and implement cost-effective solutions.

**Prof. Bo Norrving, Past President, World Stroke Organisation and Board Member, Non-Communicable Disease Alliance – presented** a case for stroke which is highly preventable stating that incidence may be cut by half because we have a package of effective interventions for risk factors. Stroke is also highly treatable with acute actions that include stroke unit care and reperfusion interventions. Prof. Norrving said that the Global Action Plan presents an opportunity that should be seized to mount for example stroke care units in hospitals all over the world. He added that the effectiveness of the Global Action Plan will be tied to its integration and uptake in Regional Action Plans and further dissemination of activities in National Action Plans.

## CONCLUSIONS

Neurologists, patients living with neurological conditions and academics joined the OneNeurology Partnership were unanimous in the need to urge the members of the WHO Executive Board to adopt an ambitious GAP in January 2022.

There was agreement that GAP presents a unique opportunity to build an integrated response for neurological disorders across the lifecourse and within our healthcare systems, with the end-objective to respond to the challenges and needs of patients living with neurological conditions globally.

The OneNeurology Partnership is viewed as a multi-stakeholder initiative, capable of offering support to WHO Member States in the run up to the adoption of the GAP in May 2022.

In view of implementation, the OneNeurology Partnership is seen as a key advocacy voice and an enabler and facilitator of dialogue and provider of key data and information supporting adoption of policy measures.

**The OneNeurology Partnership extends its gratitude to all participants for their commitment to the neurology cause.**

Presentations from the OneNeurology Virtual Roundtable are [available here](#).

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