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WORLD FEDERATION OF NEUROLOGY

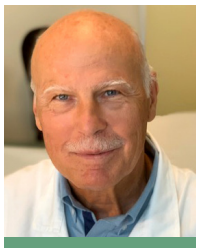
WORLD NEUROLOGY

THE OFFICIAL NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

PRESIDENT'S COLUMN

Council of Delegates Meeting and More

Prof. Wolfgang Grisold highlights upcoming elections, global activities, World Brain Day, and educational efforts.



WOLFGANG GRISOLD

I hope you have had a nice summer, and all your work has been rewarding. For the World Ferderation of Neurology (WFN), the past months have been successful, and I want to update you on the upcoming Council of Delegates (COD) meeting, global activities, World Brain Day (WBD) 2024, education, and future meetings.

COD Meeting

This year's COD meeting will convene on Sept. 25, 2024. A new trustee will be elected, replacing Prof. Alla Guekht, who successfully completed two terms as a trustee. Prof. Guekht has been very active, and during her term she has contributed enormously toward advancing the WFN in the global arena, working with the World Health Organization (WHO) and the U.N. Economic and Social Council. Prof. Guekht's mission for global neurology was successfully supported by WFN intern Dr. Ksenia Pochigaeva, who monitored and updated us on important events.

The WFN board consists of four officers, three elected trustees, and up to two co-opted trustees. The trustees are regulated by the U.K. charity law, and they bear full personal responsibility for their tasks. The elected trustees may opt to elect two co-opted trustees for one year. These elections depend on requirements such as balance of the regions, gender, or other specific issues. This year's co-opted trustees are Prof. Maria Benabdeljlil (Morocco) and Prof. Minerva Ruiz (Mexico).

The vote for the elected trustee position will be electronic, with six candidates applying for the position. (**Read their statements.**) These candidates have been scrutinized and recommended by the WFN Nomination Committee.

WFN leadership will undergo major changes in 2025, with terms ending for the president, past president, and one trustee. With a change of this magnitude, we need to ensure continuation on both the ends of the president's term will be implemented. To facilitate this continuation, we suggest having the president-elect voted on one year earlier, and having the past president continue for another year, with both serving as advisors on the board. This suggestion will be made as a motion at the COD meeting by the trustees this year.

The WFN as a global organization has many long-term projects and responsibilities for global activities as well as education and meetings. For a simple overview, we have created a page to help guide visitors through the **WFN activities**.

In addition to the trustees' reports, several committees will present their reports at the COD meeting. The financial audit (a yearly report for the U.K. Charity Commission) will be sent in advance, and delegates will be able to ask questions and give their final approval.

At this time, there will also be a call for the World Congress of Neurology (WCN) 2029, which will take place in Europe.

Global Activities

Global activities continue jointly with the WHO and the U.N. ECOSOC. On July 8, 2024, the **WHO IGAP Toolkit** was released. The WFN was honored to be a speaker at the release, which was a

see **PRESIDENT'S COLUMN** *page 3*

Dr. Chandrashekhar Meshram Recognized for Public Service

The Padma Shri Award is one of the highest civilian honors in India.

BY DR. GAGANDEEP SINGH

India's Padma Awards recognize public service and significant achievements across a variety of disciplines such as art, engineering, medicine, social work, literature, education, and sports. They are announced annually on the eve of India's Republic Day and conferred by the president at a ceremony in New Delhi.

This year, Dr. Chandrashekhar Meshram was presented with the Padma Shri Award. Dr. Meshram is a trustee of the World Federation of Neurology (WFN). He is a multifaceted personality who has excelled in clinical neurology, academic leadership, research, teaching, public health awareness, and social activities.

GAGANDEEP SINGH

Coming from a humble rural background, he grew up with commitment, hard work, and innovative ideas to eventually become a WFN elected trustee. He earned his MD and doctorate of medicine in neurology from the Post Graduate Institute of Medical Education and Research in Chandigarh, India. He is currently director and consultant neurologist at the Brain and Mind Institute in Nagpur, India.

He served as president of the Tropical and Geographical Neurology Specialty Group (TGNSG) within WFN for two terms. Under his tenure, the TGNSG became one of the most vibrant specialty groups of WFN. He represented the Indian Academy of

see **DR. MESHRAM** *page 11*

INSIDE

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FROM THE EDITORS

BY STEVEN L. LEWIS, MD, EDITOR, AND WALTER STRUHAL, MD, CO-EDITOR

A Call for Articles for World Neurology from Young Neurologists Worldwide


STEVEN L. LEWIS, MD


WALTER STRUHAL, MD

Welcome to the August 2024 issue of *World Neurology*. In this issue's President's Column, WFN President Prof. Wolfgang Grisold provides updates on several ongoing activities, including the upcoming Council of Delegates (COD) meeting in September, the recent success of World Brain Day 2024, the introduction of the WHO IGAP toolkit, the upcoming World Federation of Neurology (WFN) Digital Neurology Updates (WNU) 2024 (an important educational initiative also planned for September), as well as many other ongoing global initiatives.

Dr. Mohammad Wasay and Dr. Safa Younis provide an up-to-date summary on central nervous system tuberculosis (CNS-TB), which continues to be a global problem. Dr. Gagandeep Singh provides a report on the highly prestigious Padma Shri, which was recently awarded by the president of India to Dr. Chandrashekhar Meshram, WFN trustee. The editors send their congratulations to Dr. Meshram for this remarkable and so richly deserved honor. We thank him for his contributions to neurology in India and throughout the globe, and for his many contributions to *World Neurology*.

In this issue's History article, Dr. Peter Koehler provides his thought-provoking and well-illustrated report about a 17th century Dutch physician and the speculation surrounding a "renowned painter" whose treatment he described. Dr. Kevin Rostasy and Dr. Anna Jansen report on the activities of the European Paediatric Neurology Society (EPNS), raising the voice of the remarkably advancing field of pediatric neurology.

This issue also includes two thoughtful reports from recipients of WFN Junior Traveling Fellowships to attend the Fourth Congress of the African Academy of Neurology (AFAN), which was held in conjunction with the Fifth Congress of the Association Senegalese of Neurology (ASN), in July in Dakar, Senegal.

Dr. Olivia Begasse de Dhaem reports on the upcoming course, "Education in Headache to Health Care Professionals in Africa (EHHPA)," sponsored by the WFN, AFAN, the Global Patient Advocacy Coalition (GPAC), and the International Headache Society (IHS). The free course will take place virtually on Nov. 23, 2024, and registration is now open. Dr. László Vécsei provides an update about the ongoing activities of the International Danube Neurology Symposium for Neurological Sciences, including continuing education and international disease-based registries.

Prof. Renato Verdugo and Prof. Marco T. Medina report on the successful Latin American workshop on the Intersectoral Global Action Plan (IGAP) that took place in June in Santo Domingo, Dominican Republic. The workshop was organized by the Chilean League Against Epilepsy and the Autonomous University of Honduras with the support of the Pan-American Health Organization (PAHO).

This issue also includes an important reminder to all readers to register to attend the WFN WNU course occurring Sept. 26-27, 2024. We encourage all readers globally to attend!

Finally, we would like to remind and encourage all our younger readers from all regions of the globe, such as those neurologists in training or early in their careers, to consider contributing to *World Neurology*. We especially encourage contributions about programs and activities unique to your regions to inform our many thousands of readers worldwide. Please feel free to send any inquiries about possible articles to the editors. Email addresses can be found in the masthead on the left side of this page.

Thank you for your interest in the WFN and *World Neurology*. We look forward to continuing to share more details about upcoming activities for neurologists worldwide in future issues. •

Get the Latest in Headache Treatment and Research

Free virtual symposium to take place in November.

BY DR. OLIVIA BEGASSE DE DHAEM


OLIVIA BEGASSE DE DHAEM

The World Federation of Neurology (WFN), African Academy of Neurology (AFAN), Global Patient Advocacy Coalition (GPAC), and International Headache Society (IHS) announce the fourth Education in Headache to Healthcare Professionals in Africa (EHHPA) Symposium. It will take place virtually on Nov. 23, 2024. Registration is free and open to health care workers of all levels.

Participation in EHHPA has grown from 550 participants in 2021 to 1,029 participants in 2023. That includes participants from all parts of the world, with the majority (84%) from 38 different countries in Africa. Attendees included neurologists (37%), general practitioners (17%), and neurologists in training (13%).

As a result of the program, 80% of participants have indicated they can distinguish migraine from other headache disorders, and 55% gained confidence in terms of headache management. The top three most-attended sessions were Infection & Headache, Trigeminal Autonomic Cephalalgias, and Secondary Headaches.

This year's event brings world-renowned speakers to cover practical topics, such as headache evaluation and management in both the primary care and emergency room settings, headache in systemic diseases, the epidemiology of headache in low- and middle-income countries, and headache considerations in and around pregnancy. The symposium will be offered in English with live parallel sessions in French.

Register for the free symposium and share with colleagues and health care workers of all levels. •

Dr. Olivia Begasse de Dhaem, MD, FAHS, is vice chair of the Global Patient Advocacy Coalition (GPAC), medical director and founder of the Institute for Headache and Brain Health, and an assistant professor of neurology at the University of Connecticut.

PRESIDENT'S COLUMN

continued from page 1

successful presentation of longstanding developments and will help all stakeholders implement the IGAP project. There are many entry points to the project, and all WHO member states will have the opportunity to adapt the IGAP to their needs by using this toolkit.

The main pillars of the IGAP are advocacy, prevention, therapy, research and development, and public health. These pillars provide opportunities for all to participate and reach the goals. As with our participation in the development and support of the toolkit, the WFN has taken the IGAP as a personalized agenda to move and develop further, and we welcome the WHO's strong engagement in neurology. This is a unique opportunity, and the IGAP will continue to be a permanent platform for global neurology that will aid in implementing neurology and neurology services in all countries in need.

At the U.N. ECOSOC meeting in New York, the WFN was represented by Prof. Guekht. This United Nations High-Level Political Forum (HLFP) on sustainable development took place July 8-17, 2024, under the auspices of the ECOSOC. The main theme of the ECOSOC was "Reinforcing the 2030 agenda and eradicating poverty in times of multiple crises: the effective delivery of sustainable, resilient, and innovative solutions." The WFN submitted a written statement on "Advancing Brain Health for Sustainable Development: A Call to Action."

WBD Activities

WBD 2024 featured the topic "Brain Health and Prevention," and followed our series of WBDs promoting brain health. It added to previous important features such as disability, which was the theme in 2023. Both dedicated WBDs have left us with many suggestions and tasks. We have learned that disability is more common than we assume. The recent update of the Global Burden of Disease has confirmed this and increased the spectrum from 17 to 34 neurological conditions.[1] Disability in neurological disease not only includes long-term care and rehabilitation, but also the prevention of neurological diseases and avoidance of stigma.

Prevention, which was chosen for this year's WBD, is a powerful tool that may be underused. We have seen many examples, including stroke, cerebrovascular disease, and several others. Recently, we have been exposed to many prophylactic recommendations to prevent dementia.[2] In addition, we also face the introduction of new therapies, and we hope to gain strength and competence in these important areas to prevent and even cure dementia.

As with any biological condition, there are factors that can be modified, and others that can not. The impact of aging on cell biology and on the body are well known to neurologists. Many age-related factors, such as brain volume, cognitive capacities, performance of the neuromuscular system, and posture and gait, are implicitly incorporated into our daily work. We are aware that brain function in aged individuals varies, depending on many factors. The topic of aging and senescence is important for all parts of the body.[3] Insight into these mechanisms will be important for future research.

As the age pyramid affects all global regions, this is a common issue for neurology worldwide. In addition to research, prevention, and care, we must also be aware to prevent ageism as brain health concerns the entire life span.[4]

Please see our report on **WBD 2024**. The webinar was attended by 1,000 participants. See a list of selected articles about WBD. (See Table 1.)

Organization or Publication	Article Title	Link
The Lancet	World Brain Day 2024: A Focus on Brain Health and Prevention	https://www.thelancet.com/journals/laneur/article/PIIS1474-4422(24)00270-9/fulltext
WFN	World Brain Day 2024	https://wfneurology.org/world-brain-day-2024
PR Newswire	2024 World Brain Day Dedicated to Brain Health and Prevention	https://www.prnewswire.com/in/news-releases/2024-world-brain-day-dedicated-to-brain-health-and-prevention-302137564.html
Journal of Neurological Sciences	World Brain Day 2024: Promoting Brain Health and Prevention	https://www.jns-journal.com/article/S0022-510X(24)00230-2/abstract
EPNS	World Brain Day 2024	https://www.epns.info/world-brain-day-2024/
National Library of Medicine	Wolrd Brain Day 2024: A Focus on Brain Health and Prevention	https://pubmed.ncbi.nlm.nih.gov/39033775/
WFN	World Brain Day: Background	https://wfneurology.org/world-brain-day-background
National Today	World Brain Day 2024	https://nationaltoday.com/world-brain-day/
World Neurology	World Brain Day 2024: Promoting Brain Health and Prevention Globally	https://worldneurologyonline.com/article/world-brain-day-2024-promoting-brain-health-and-prevention-globally/
Revival Research Institute	World Brain Day 2024: Tips to Improve Your Brain Health	https://revivalresearch.org/blogs/world-brain-day-2024
UBC News	World Brain Day 2024: Protecting Our Future	https://events.ubc.ca/event/world-brain-day-2024-protecting-our-future/
Science Open	World Brain Day 2024	https://blog.scienceopen.com/2024/07/world-brain-day-2024/
Aspire	World Brain Day 2024	https://aspire.care/featured/world-brain-day-2024/
Medindia	World Brain Day 2024: Advocating for Brain Health and Prevention	https://www.medindia.net/news/healthwatch/world-brain-day-2024-advo cating-for-brain-health-and-prevention-216489-1.htm
American Brain Foundation	World Brain Day: 4 Simple Ways to Support Brain Health	https://www.americanbrainfoundation.org/world-brain-day-4-ways-to-support-brain-health/

Table 1. Organizations and publications featuring WBD articles.

Several awards for brain health projects were presented during a meeting of the Chinese Society of Neurology.

On WBD, Beijing Tiantan Hospital offered a free neurologic consultation day.

Chinese Society of Neurology

The Chinese Society of Neurology set aside July 21, 2024, to celebrate brain health and prevention. The event featured a large meeting with keynote lectures and several dedicated sessions about brain health at the China National Convention Center in Beijing. The theme was "World Brain Day 2024: Brain Health and Prevention." The goals were to enhance public awareness of brain health, foster scientific advancement in brain health, and prevent and treat significant neurological and psychiatric disorders, including cerebrovascular diseases, cognitive disorders, and depression. There was also a focus on children's brain development.

The conference invited prominent experts and scholars from both domestic and international arenas. Their presentations brought focus to the latest research advancements. There were also themed forums that presented and explored 12 specialized reports from various angles.

During the meeting, several awards for brain health projects were presented. On WBD, Beijing Tiantan Hospital offered a free neurologic consultation day that was well attended. Please also see the ***JNS* WFN service page** for more details.

WFN Educational Activities

We invite you to participate in the WFN's educational activities. **The e-Learning Hub** has now received an improved, user-friendly interface, which will help guide all users of our website to engage in our archive and see past educational activities. Users can also connect to ongoing international activities.

The **WFN Digital Neurology Update** (WNU) takes place virtually Sept. 26-27, and serves as an update platform for neurology. There will be six plenaries from world-renowned experts on stroke, epilepsy, movement disorders, multiple sclerosis, headache, and dementia. During a break, attendees will have the opportunity to see industry and society

see **PRESIDENT'S COLUMN** *page 13*

Central Nervous System Tuberculosis

Current status and future treatments.

BY MOHAMMAD WASAY, MD, FRCP, FAAN, AND SAFA YOUNIS, MBBS

Tuberculosis (TB) carries a huge burden around the globe. Approximately 25% of the global population is a carrier of the mycobacterium tuberculosis bacterium. About 5%-10% of the individuals in that group will develop tuberculosis during their lifetime.[1]

Although pulmonary TB is the primary form, extrapulmonary TB (EPTB) accounts for 15% of cases.[2] Central nervous system tuberculosis (CNS-TB) is a severe type of tuberculosis, and it accounts for 1%-2% of TB cases worldwide.[3] CNS-TB is more common in children and is associated with a high morbidity and mortality, especially in children under 5 years of age and patients under immunosuppression.[4,5] With about 10 million new TB patients diagnosed each year, it is estimated that around 100,000 new cases of CNS-TB occurred in 2019.[5]

MOHAMMAD WASAY

SAFA YOUNIS

Tuberculous Meningitis

The most common type of CNS-TB is tuberculous meningitis (TBM) with an estimated prevalence of 2.11 per 100,000 people and mortality rates from 20%-50%. One-third of survivors with CNS-TB suffer long-term neurological disabilities such as cranial nerve palsies, hemiparesis, ophthalmoplegia, psychiatric disorders, and seizures. The morbidity and mortality rates of CNS-TB are associated with a country's TB burden, Human Development Index (HDI), and the prevalence of HIV. Low- and middle-income countries are disproportionately affected.

Tuberculous meningitis is relatively rare and difficult to diagnose, therefore it often goes under-reported. TBM accounts for 5%-10% of all TB cases. It has a high morbidity and is responsible for 40% of deaths due to TB.[8,9]

TBM can cause severe complications like space-occupying tuberculomas and cerebral infarction.[6] This results in a poor prognosis. The frequency of infarction in TBM has a wide range from 15%-27%. A greater occurrence is observed in young children who may be severely affected. Inflammatory basal exudate surrounding critical cerebral arteries like the circle of Willis and its branches can cause a periarteritis that is responsible for obliterative vasculitis and infarction.[7] Infarction is a predictor of long-term disability in TBM patients.[8]

Tuberculous Myelitis

Tuberculous myelitis affects up to 3% of patients with TB. This is typically due to hematogenous spread of mycobacterium tuberculosis and can involve the spinal cord, roots, or spinal meninges. In developing countries, spinal TB is one of the most common causes of paraparesis.

In a study that took place in Aga Khan University Hospital in Pakistan, 20 patients with TB myelitis were identified through the ICD-9 coding system but only 10 fulfilled the inclusion criteria. The most prevalent symptoms observed in these patients upon presentation included:

- fever (70%)
- paraplegia (60%)
- paraparesis (30%)
- urinary retention (50%)
- bowel incontinence (30%)
- urinary incontinence (20%)
- monoparesis (10%)

Spinal tuberculoma or TB myelitis can occur after initiating antitubercular therapy for tuberculous meningitis or systemic TB. This phenomenon is called a paradoxical response.[9] The paradoxical response to antitubercular therapy (ATT) typically occurs around two weeks into treatment. It may involve a worsening of existing tuberculous lesions or the appearance of new lesions in patients who initially showed improvement with ATT. Up to 10% of patients with CNS-TB may experience this with a higher rate of up to 30% with those with HIV.[10]

Imaging and Diagnosis

Imaging plays a crucial role in diagnosing CNS-TB and its complications, as well as monitoring treatment response. Contrast-enhanced magnetic resonance imaging (MRI) is the preferred modality of choice due to its diagnostic accuracy. CNS-TB may closely resemble other neurological conditions, such as brain tumors. Thus, it is important for clinicians to have better understanding and familiarity of the imaging features of CNS-TB on computed tomography (CT) and MRI to aid in a quick and accurate diagnosis. CNS-TB can present in various ways on imaging, such as a diffuse form like basal exudative leptomeningitis, or localized forms like abscesses, tuberculomas, ventriculitis, or cerebritis. Meningitis (95%) and tuberculomas (2%) are the most common presentations.[11]

Radiomics is an evolving field of research focused on enhancing diagnostic precision by extracting quantitative data from clinical images. Magnetic resonance (MR) based radiomic features are gaining recognition in numerous intracranial pathologies, including tumors and neurodegenerative disorders. Studies suggest that certain MR textural parameters — including histogram skewness, gray-level co-occurrence matrix (GLCM) correlation, and neighboring gray-level dependence matrix (NGLDM) coarseness — hold promise as imaging biomarkers. Biomarkers such as these have the potential to predict response to treatment in patients with intracranial tuberculomas.[12]

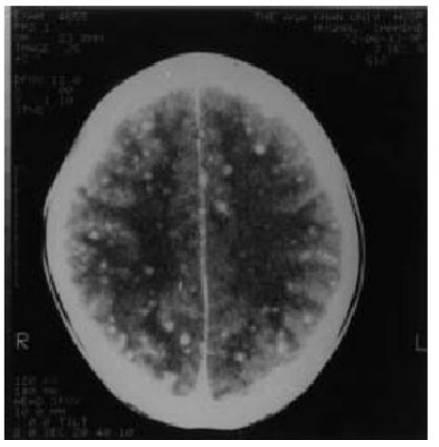


Figure 1. Post-contrast CT scan in axial plane showing multiple enhancing lesions in the brain. The diagnosis of TB was confirmed by CSF.

Treatment and Long-Term Care

If clinical suspicion arises from imaging, treatment typically comprises of antitubercular therapy. There is a four-drug regimen (ethambutol, isoniazid, pyrazinamide, rifampin) supplemented with a corticosteroid that may reduce morbidity and mortality. However, drug resistance, immune reconstitution inflammatory syndrome (IRIS), and HIV coinfection can significantly complicate the diagnosis and management of CNS-TB.[13]

According to the British Infection Society, there can be a multiphase treatment therapy for tuberculosis. The initial phase, lasting 2-3 months, involves a combination of isoniazid, pyrazinamide, and rifampin, along with either ethambutol, fluoroquinolone, or a streptomycin. This is followed by a consolidation phase of up to 12 months, during which isoniazid and rifampin are continued. In some cases, the total treatment duration may be extended to 18 months.

For drug-resistant tuberculosis, treatment should be guided by specific resistance patterns and relevant guidelines. Throughout treatment, close monitoring of blood counts, liver function, and kidney function is essential as first-line antituberculosis drugs can cause hematologic abnormalities and organ damage. Vigilance and close

see **TUBERCULOSIS** *page 12*

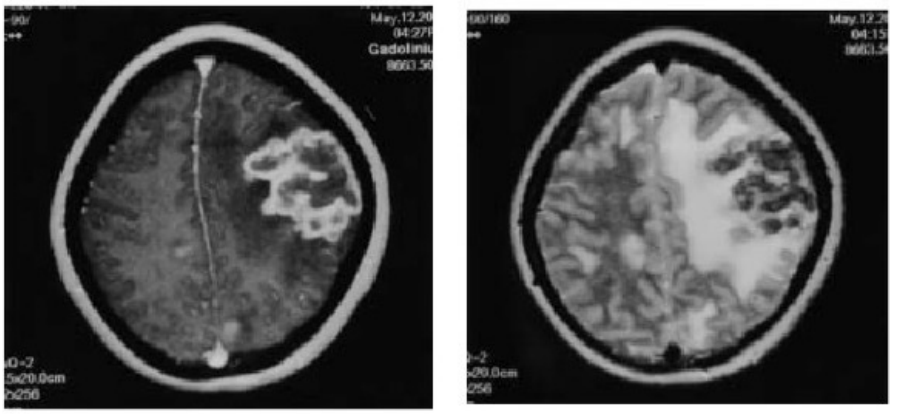


Figure 2. Left: Post-contrast T1-weighted MRI in axial plane showing a multilobular enhancing lesion in left frontal lobe. Right: T2-weighted MRI in axial plane showing multilobular mass with surrounding edema. The diagnosis of TB was confirmed by biopsy and histopathology.

END TB STRATEGY

To raise the profile of neurological disorders globally, the World Federation of Neurology (WFN) leverages its position as a WHO non-state actor and a non-governmental organization in consultative status with the UN Economic and Social Counsel (ECOSOC). The WFN commends the progress of the End TB Strategy, adopted by the World Health Assembly in 2014 as part of the Sustainable Development Goals (SDGs), and has taken the opportunity to intervene on several occasions to bring attention to the neurological complications of tuberculosis.

A written statement was submitted during the September 2023 SDG Summit in New York, highlighting the need for collaboration among multiple stakeholders and equitable access to health care to ensure the success of the End TB Strategy. The role of neurologists is crucial for the diagnosis, treatment, and prevention of the dangerous neurological complications of TB, including tuberculous meningitis. In May 2024, the WFN delegation had the privilege to address the World Health Assembly in Geneva and reaffirm the interconnection between decreasing the burden of tuberculosis and neurological health.

—Ksenia Pochigewa, Alla Guekht, Wolfgang Grisold.

HISTORY

Was it Rembrandt?

A centuries-old mystery shrouds a renowned painter and his imagination.

Figure 1. Rembrandts Anatomical *Lesson of Dr. Nicolaes Tulp* (1632); © Mauritshuis, The Hague.

BY PETER J. KOEHLER

The Dutch physician and mayor of Amsterdam Nicolaes Tulp (1593-1674) is known for being depicted in the 1632 painting *The Anatomy Lesson of Dr. Nicolaes Tulp* by Rembrandt van Rijn (1606-1669). (See Figure 1.) The criminal Aris't Kint, the person on whom an autopsy is performed in the painting, was sentenced to "punishment with the cord," which was carried out on Jan. 31 of that year. His corpse was made available to the Amsterdam surgeons' guild, of which Tulp was *praelector anatomiae*, a term the guild used for anatomy instructors. Tulp had already been in contact several times with the 26-year-old Rembrandt to discuss a painting of an anatomy lesson. In his composition, Rembrandt broke with the traditions of the group portrait for the time.[1]

Observationes Medicae (1641)

Tulp studied medicine at Leiden University and settled in Amsterdam. He chose his surname from the tulips that graced the facade of his house. He was the first Amsterdam physician to visit his patients by coach. One of his contemporaries described him as an intelligent and capable man, with a practice large enough "so that it was necessary to drive a coach ... having prepared a place in the cellar under his house ..."

His *Observationes Medicae* was published in 1641 and contained three books. The second edition, published in 1651, contained four books and 233 cases. (See Figure 2.) Many editions followed as the work was popular and praised by many, including the Swiss physician Albrecht von Haller (1708-1777). Some of the neurological cases in *Observationes Medicae* have been discussed in recent medical literature. These include spina bifida,[2] cluster headache,[3] head injury[4] including a case with a depressed fracture for which the trepan was applied, cerebral hemorrhage, beri-beri (polyneuropathy that is now known to be caused by thiamine deficiency), hydrocephalus, diastematomyelia, posttraumatic amnesia,[5] and several types of tremors.[6]

Traumatic Hysteria

There is an interesting case from Tulp's book that was referred to by the Dutch physician Eduard Hendrik Marie Thijssen (1856-1932), but it has not been discussed in more recent history.

Thijssen was the son of Amsterdam professor of medicine Henricus Franciscus (1820-1915). After studying medicine, young Thijssen defended his dissertation on Nicolaes Tulp in 1881.[7] He settled in Paris, where he was taught by Jean-Martin Charcot (1825-1893) at the Salpêtrière.

Like his grandfather Henricus Franciscus Thijssen (1787-1830), who also published on hysteria, Eduard Thijssen had a special interest in this condition. He wrote a second dissertation, *Contribution à l'étude de l'hystérie traumatique* (1888), which he dedicated to "Mon cher et vénéré maitre M. le Professeur Charcot" (My dear and revered master Professor Charcot). (See Figure 3.) In this dissertation, he mentioned an interesting case, which he had read in Tulp's *Observationes*, of "a famous painter of Rembrandt's time (perhaps even Rembrandt himself), who was bedridden for an entire winter with mental paralysis of the legs."[8]

Melancholy

In Chapter 18 of the first book of Tulp's *Observationes Medicae*, we indeed find the case with the title "Imaginaria ossium mollities" or "Imagined softness of the bones." (See Figure 4.) Tulp introduced his case with information on diseases caused by "atra bile" (literally "black bile" which at the time was thought to cause melancholy) and imagined symptoms.

Tulp referred to "the ingenious invention of Philodotus Medicus" for treating a melancholic king, who imagined his head had been cut off. Philodotus put a leaden hat on the king's head. The weight of the hat made the king think that he had recovered his head, so that he was free from his delusion.

The case has been referred to by many scholars, including English author Robert Burton (1577-1640) in his famous *Anatomy of Melancholy* of 1621.[9] (See Figure 5.) Not much has been discovered about Philodotus since the anecdote was first published by Alexander of Tralles (c. 525-c. 605).[10]

With respect to the treatment of such patients, Tulp also referred to the Roman encyclopedist Cornelius Celsus (c. 25 BCE – c. 50 CE), who wrote in his famous *De Medicinae* "… in others, melancholy thoughts are to be dissipated, for which purpose music, cymbals, and noises are of use. More often, however, the patient is to be agreed with rather than opposed, and his mind slowly and imperceptibly is to be turned from the irrational talk to something better."[11]

Softness of the Bones

Tulp described his own patient as "Insignis Pictor infestatus aliquandiu, ab atrâ bile" or

see **HISTORY** *page 6*

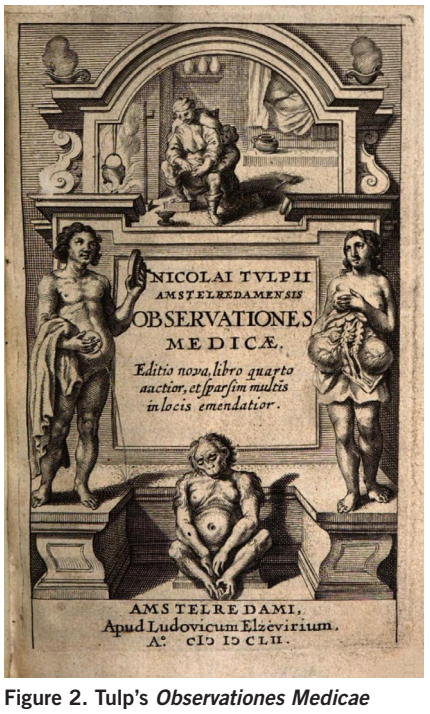
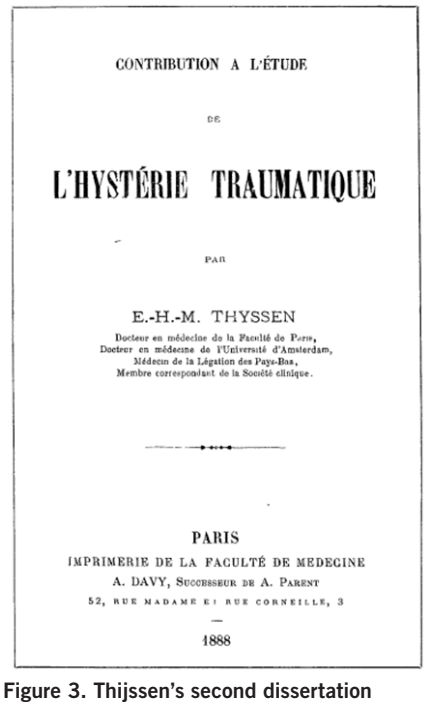


Figure 2. Tulp's *Observationes Medicae* (second edition 1652).



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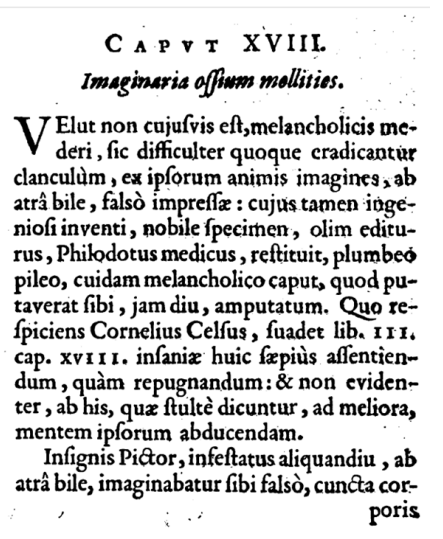
Membre correspondant de la Société clinique.

PARIS
IMPRIMERIE DE LA FACULTÉ DE MEDECINE
A. DAVY, SUCCESSEUR DE A. PARENT
52, RUE MADAME ET RUE CORNEILLE, 3

1888

Figure 3. Thijssen's second dissertation dedicated to Charcot (1888).



CAPVT XVIII.

Imaginaria ossium mollities.

VElut non cujusvis est, melancholicis mederi, sic difficulter quoque eradicantur clanculùm, ex ipsorum animis imagines, ab atrâ bile, falsò impressæ: cujus tamen ingenioſi inventi, nobile specimen, olim edituras, Philodotus medicus, restituit, plumbeo pileo, cuidam melancholico caput, quod putaverat sibi, jam diu, amputatum. Quo respiciens Cornelius Celsus, suadet lib. III. cap. XVIII. insaniæ huic sæpiùs assentiendum, quàm repugnandum: & non evidenter, ab his, quæ stultè dicuntur, ad meliora, mentem ipsorum abducendam.

Insignis Pictor, infestatus aliquandiu, ab atrâ bile, imaginabatur sibi falsò, cuncta corporis

Figure 4. Chapter 18 of Tulp's *Observationes* on Imaginaria ossium mollities (Imagined softness of the bones).

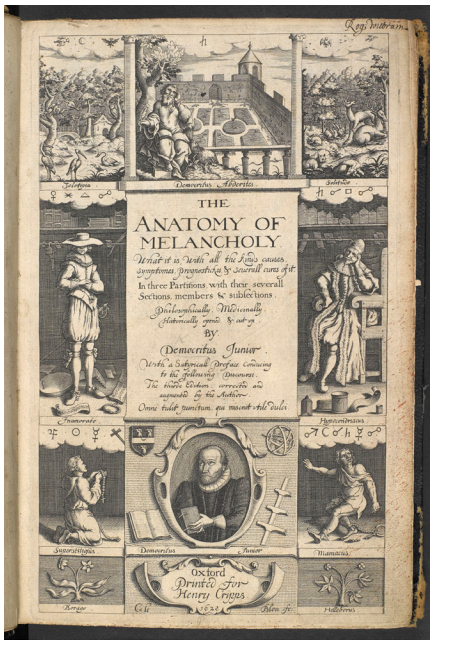


Figure 5. Robert Burton's *Anatomy of Melancholy*, in which he referred to Philodotus' case.

HISTORY

continued from page 5

"a renowned painter, plagued for some time with the black bile." The patient imagined that the bones of his body were so soft and pliable that they would easily fold if he put the slightest pressure on them.

"Which imagination being deeply engraved in his soul, kept himself in bed a whole winter; fearing, when he arose from it, of some calamity, which was more certain than certain to befall him, which he had hitherto dreaded, a deformity of his legs, or rather of his whole body," Tulp wrote.

Understanding the patient's fear, Tulp did not want to oppose him. He visited him secretly to slowly ease his imagination, assuring him that this softness was not unknown to physicians. Here he referred to *De abditis rerum causis* (Of the hidden causes of things; 1548) by the French physician Jean François Fernel (1497-1558), who introduced the term "physiology."

Tulp told the painter that as wax can be made soft and hard, medicine could do the same in his legs. Tulp said that within three days the painter's legs would be restored to their former firmness, and by the sixth day, he would have the ability to go anywhere, but only if he listened to Tulp's advice.

"One can hardly say, how great hopes these promises raised to regain health, and how obedient they made him, to use the remedies prescribed for the black bile. Which being duly driven from the body, we were easily able to keep our word, ordering him to rise from the bed in which he had lain a whole winter," Tulp wrote.

At first, the painter was told to stand on his feet and not allowed to walk. He would not have permission to go where he wished until the sixth day. "But the sixth day now approaching, we showed openly the truth of our promise: giving him not only freedom to walk about the room, but also to appear in public, and to perform all the activities of a healthy man at once." Tulp concluded by wondering how this painter had not been able to see that the inability to walk, which had kept him in bed all winter, had only been in his imagination, although he was otherwise a great craftsman, "having scarcely anyone equal to him."[12]

Figure 6. Portrait of Nicolaes Tulp by Frans Hals (1633); © Collection Six, Amsterdam.

Figure 7. The expensive house Rembrandt bought in 1639, presently Rembrandt House Museum, Amsterdam.

Who Was This Painter?

The question now is, which "renowned painter" had Tulp been secretly treating? In other cases he described in his book, he often provided the full name of his patients, as in the case of cluster headache in the 13th chapter of the first book: Isaak van Halmaal.[3] He must have seen the patient between 1614, the year in which he obtained his MD, and 1641, the year in which *Observationes Medicae* was published.

Could it have been one of the painters who did a portrait of Tulp? There were at least six painters who did, including Frans Hals (1580-1666; see Figure 6), Cornelis van der Voort (1576-1624), Adriaen Cornelisz Beeldemaker (1620-1709), Jurgen Ovens (1623-1678), Nicolaes Eliasz Pickenoy (1588-1650/6), and the aforementioned Rembrandt van Rijn. If it was one of these six painters, which one was famous in the 1630s and suffered from melancholy or depression?

Retrospective diagnoses are always hazardous. Several physicians have written about depression that would have been recognizable in Rembrandt. One author wrote that he was depressed, as seen in several of his many self-portraits,[13] but he was contradicted by a critic.[14] Yet another wrote about "Rembrandt's metaphoric portrayal of the depressed mind" in reference to his etching of Saint Jerome in a Dark Chamber in 1642, the year in which his wife Saskia van Uylenburgh died.[15] This was a year after Tulp published his Observationes.

In 1640, Rembrandt's mother died and prior to that his first three children died.[15,16] In 1639, he bought the expensive three-story house on St. Anthony Breestraat (today's Rembrandt House Museum) and received the commission for *The Night Watch* (1642), on which he would work for three years. (See Figure 7.) One of his biographers, art historian Jakob Rosenberg (1893-1980), used the term "crisis" in reference to this period of his life.[17]

As Tulp visited his patient secretly and did not mention him by name in his case description, we will probably never be sure about the identity of the painter, but it could have been Rembrandt van Rijn. •

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European Paediatric Neurology Society

Raising the voice of pediatric neurology.

BY KEVIN ROSTASY AND ANNA JANSEN

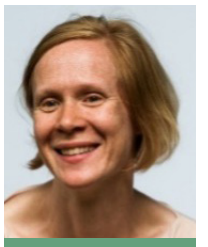
Pediatric neurology is a discipline focused on diagnosis, comprehensive management, and research into diseases of the central and peripheral nervous system from fetal life to transition into adulthood. It is a field that has **grown in the last half century** and has recently seen leaps in innovation, including diagnostic methods, novel treatments including gene therapy, interventions, and research. It is vital that the significant burden of neurological diseases in childhood is addressed through research and education as these disorders have a lifelong impact on the individual, their careers, and society as a whole.

EUROPEAN JOURNAL OF PAEDIATRIC NEUROLOGY

In 1996, the **European Paediatric Neurology Society (EPNS)** was legally registered in France based on open individual membership, with English as the official language. The EPNS is now an established international, independent non-profit society for physicians, health professionals, scientists, and students with research and/or clinical interest in pediatric neurology. It is governed by a board of 30 elected members.

The **EPNS mission statement** is to promote excellence in patient care, research, and education to improve the neurological outcome of children and young people in Europe and across the world. With about 2,500 members, the EPNS membership base has been steadily increasing and strengthening every year. The *European Journal of Paediatric Neurology* is the official society journal, and is published six times a year. It publishes high-quality papers primarily of a clinical research nature on the whole spectrum of pediatric neurological disease.

KEVIN ROSTASY



ANNA JANSEN

A major focus of the society is to advocate for pediatric neurology at the highest level by nurturing national, multidisciplinary, and international collaborations with similar societies, policymakers, patient groups, and other major stakeholders. The **Committee of National Training Advisers (CNA)** serves as a vital advisory group to the EPNS and as a link to the national pediatric neurology societies.

In 2023, the EPNS started to build a framework centering on the 10-year **Intersectoral Global Action Plan on Epilepsy & Neurological Disorders (IGAP)**, with the goal of implementing the plan with specific reference to pediatric neurology. IGAP is an unprecedented opportunity to lobby for the importance of brain health, and easy equitable access to the highest standard of patient care in neurology across the patient's lifespan, while supporting their caregivers and other family members. The EPNS has appointed IGAP representatives in 41 European countries working with the EPNS to implement IGAP at a national level.

The EPNS promotes excellence in education, providing a comprehensive learning environment in pediatric neurology to students, trainees, and qualified professionals in all stages of their careers to improve the neurological outcome of children and young people. For example, a new **EPNS Exam** has been introduced to assess the basic knowledge needed to underpin pediatric neurology training. In addition, the **EPNS Moodle** is available to provide a learning platform for EPNS members. The society offers many other regular educational opportunities, including the well-established weekly **EPNS webinars**, **3-year EPNS rolling training courses** covering the major topics in the pediatric neurology **syllabus**, **EPNS Central Eurasia Workshops,** and the **EPNS Caucasus teaching courses.** The EPNS continues to award **EPNS Fellowships** and **EPNS Visiting Teachers** to selected EPNS members who benefit from these unique opportunities.

The EPNS strives to foster, expand, and support science and clinical research in child neurology by bringing together the best clinicians and scientists in the field. This includes the society's flagship **biennial EPNS Congresses** where delegates enjoy a scientifically stimulating program and interaction. The **next EPNS Congress** will take place on July 8-12, 2025, in Munich.

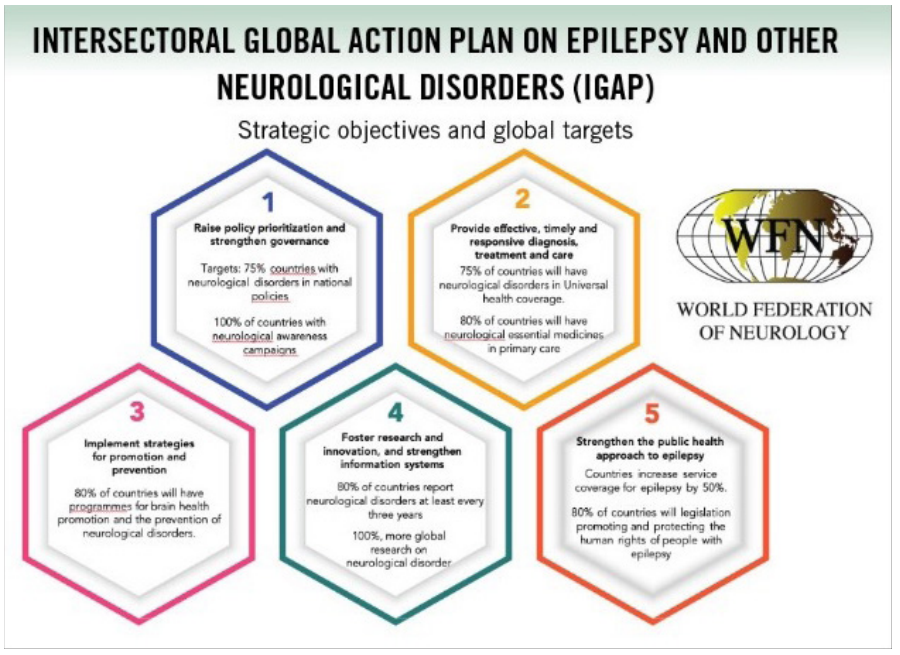
The **EPNS Research Meeting** takes place every other year. It is a forum for researchers in pediatric neurology to present their work, creating the possibility for future collaborative research. The EPNS looks forward to welcoming pediatric neurologist researchers at all stages of their careers to the **next EPNS Research Meeting,** which will take place Oct. 17-18, 2024, in Ljubljana, Slovenia.

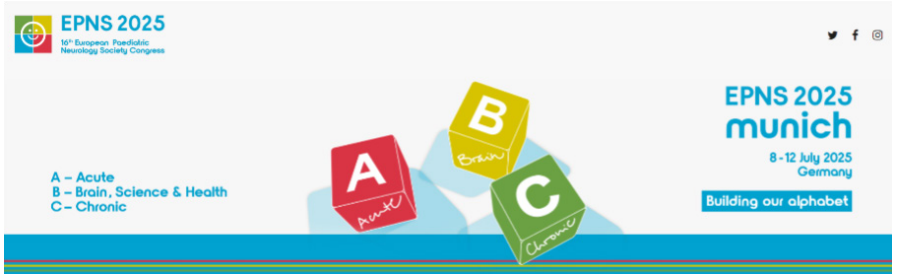
The **Young EPNS (YEPNS)** is a motivated group bringing together younger members to learn, collaborate, and network. They have made a significant contribution to EPNS activities, including contributing to the EPNS Guidelines Committee, which was created to promote high-quality, homogenous evidence-based patient care.

If you would like to **join the EPNS**, contact our administration team at **info@epns.info.**

Education, **P**romotion, **N**etworking, **S**cience for pediatric neurology •

Kevin Rostasy is president of the EPNS, and Anna Jansen is chair of the EPNS Advocacy and Collaboration Committee.





WORLD FEDERATION
OF NEUROLOGY

WNU 2024

WORLD FEDERATION OF NEUROLOGY DIGITAL NEUROLOGY UPDATES

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LATEST NEUROLOGY UPDATES

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World Federation of Neurology

Fostering quality neurology and brain health worldwide

Join Us for the WFN Digital Neurology Updates: WNU 2024

WFN Digital Neurology Updates, **WNU 2024**, is set to take place on September 26-27. This online event is designed to transcend geographical and logistical barriers, making it accessible to neurologists, researchers, and healthcare professionals worldwide.

A Comprehensive Program

WNU 2024 will provide a platform for sharing the latest updates in critical areas of neurology. **Over two days**, expert speakers will cover a broad range of topics, including **Epilepsy**, **Dementia**, **Multiple Sclerosis**, **Movement Disorders**, **Stroke**, **Headache** and more.

Convenience and Global Dialogue

The digital format of WNU 2024 not only offers convenience but also fosters a global dialogue. This event will allow for an exchange of ideas and experiences that will enrich our collective understanding and practice of neurology. Furthermore, the event will be CME accredited, enabling participants to earn continuing education credits.

Exclusive Benefits for Participants

In addition to the invaluable educational experience, WNU 2024 offers an exclusive opportunity for everyone who registers by August 31st. Participants will receive a discount code for **10% off** their registration for the **World Congress of Neurology 2025**, to be held in Seoul, South Korea.

We invite you to explore the program and join WNU 2024, with registration fees starting as low as $80 for students and $100 for participants from low and middle-income countries. Stay abreast of the latest updates in neurology and connect with peers from around the world.

Don't miss the chance to enhance your knowledge and take advantage of the discount for WCN 2025. We look forward to connecting with you during this engaging and stimulating educational experience!

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Honduras Neurology/Psychiatry Clinic: Patient Satisfaction Survey

Medications and services can be costly and difficult to obtain for many Honduran patients.

BY KAITLYN ALLEMAN, PROF. LAWRENCE ROBBINS, GENESIS MEJIAS, MD, SOFIA DUBON, MD, AND NELSON BETANCOURT, MD

Our rural Honduras neurology and psychiatry clinic conducted a simple survey. The primary purpose of the survey was to assess patient satisfaction. We also asked the patient to rate the most important aspect of the clinic. We collected diagnoses and demographics.

This free clinic was established by neurologist Lawrence Robbins, MD, in 2017, and was featured in the Aug. 9, 2021, issue of *World Neurology*. There are three neurologists, an EEG technician, two psychiatrists, and a clinic nurse. The neurologists and psychiatrists are dedicated and idealistic. Several thousand patients regularly attend the clinic. The clinic provides free physicians, tests, and medications.

Sixty-seven patients were surveyed: 41 were female and and 26 were male. The ages ranged from 18 to 86. The specific age breakouts were:

- **Ages 18 to 20:** 11 patients
- **Ages 21 to 40:** 23 patients
- **Ages 41 to 60:** 13 patients
- **Ages 60 and up:** 20 patients

The majority of patients resided in rural areas surrounding the main city of Tegucigalpa (there are neurologists in the main cities of Honduras). Most of the patients could not afford neurology or psychiatry services. The patients were randomly chosen, and the survey results were anonymous. Verbal consent was obtained. An Institutional Review Board was used.

The survey collected basic demographic data and diagnoses. Three questions were asked:

What is the most important reason for coming to our clinic?

a. To see the doctor and find out what is wrong
b. To receive medicines

Are you satisfied with the services at the clinic?

a. Yes
b. No

Has your life changed for the better since coming to the clinic?

a. Yes
b. No

The survey also solicited additional comments regarding the clinic.

Results

Question 1: Sixty-two out of 67 patients indicated that seeing the doctor and finding out what was wrong was most important. Only five patients listed receiving the medications as most important. Of these five patients, three had epilepsy as the primary diagnosis, one had migraine, and one was diagnosed with Parkinson's disease. This was surprising, as we thought the free neurologic and psychiatric medications would be the primary reason for attending.

Question 2: All 67 of the patients listed themselves as satisfied. This is not surprising, as these patients have had no access to neurologic or psychiatric services.

Question 3: Sixty-six patients indicated that their lives had changed as a result of coming to the clinic. One patient did not provide an answer.

Patient comments: Forty patients made positive comments. There were three negative comments. Thirteen comments expressed thanks, 12 mentioned the good service, 10 praised the physicians or staff, three mentioned that everything was free, while two said they liked the medications. The negative comments mentioned that the pharmacy could improve, other specialties were needed, and the clinic should offer better instructions on how to pay.

Neurology Diagnoses in 67 Patients

- **Epilepsy:** 16 patients (10 females, six males)
- **Headache (primarily migraine):** 13 patients (nine females, four males)
- **Parkinson disease:** 9 patients (two females, seven males)
- **Miscellaneous:** one patient each: dystonia, cysticercosis, muscle disease, fibromyalgia.

Psychiatric Diagnoses

- **Depression (includes unipolar and bipolar):** 12 patients (eight females, four males)
- **Anxiety:** 11 patients (seven females, four males)
- **Insomnia:** 1 patient (female)

Discussion

The Honduran patients expressed a high degree of satisfaction with the clinic. Most patients indicated their life had changed for the better. One main reason for attending the clinic was to receive a diagnosis. This was surprising, as we would have thought that obtaining the free medications was most important. If we only surveyed patients who had been attending the clinic for some time, the medications may have become the most important aspect.

Epilepsy was the most common neurologic diagnosis, followed by headache and Parkinson's disease. Depression and anxiety were the primary psychiatric diagnoses. This was a limited number of patients. If we had surveyed 2,000 of our patients, headache probably would have been the most common diagnosis, followed by epilepsy. Although headache is more prevalent than epilepsy in Honduras, patients with epilepsy may be more motivated to seek medical care.

Most Hondurans cannot afford more than basic medical care. There are numerous free clinics providing this care. Medical missions to Honduras are numerous. The Honduran neurologists and psychiatrists are excellent. However, neurologic and psychiatric care is scarce for most of the population. Access to free neurology services is available in the main city of Tegucigalpa, but wait times are long, and rural patients usually cannot make the arduous trip. Patients must pay for an EEG or MRI, both of which are usually unaffordable. An MRI may cost three or four weeks of wages. In our rural clinic, we do 25 EEGs per month at no cost.

Honduran patients have access to basic neurologic medicines. For epilepsy, these include phenobarbital and phenytoin. But even these basic meds may be difficult to access. There is a reasonable selection in Honduras of the various anti-seizure medications. These include carbamazepine, lacosamide, valproic acid, vigabatrin, and others. These are usually unaffordable for most Honduran patients.

For migraines, basic preventives are available, including amitriptyline, beta blockers, topiramate, valproic acid, and a few others. However, only a fraction of patients with migraine are prescribed the preventives. Most cannot afford these medications. Triptans are available but are unaffordable for 95% or more of patients. NSAIDS (both PO and injections) and ergotamine compounds are often prescribed. Opioids are almost never used.

Epilepsy is frequently encountered in Honduras. There is a relatively high prevalence of epilepsy in Latin America. Infectious disease and trauma may account for some of this. Many patients are never diagnosed or treated. Despite the difficulty in obtaining MRIs and EEGs, Honduran neurologists are adept at treating epilepsy. There is an epilepsy surgery program in Tegucigalpa.

Migraine is a major health issue in Honduras. Migraine greatly affects the Honduran patients' work and home life. For many of the impoverished patients, missing work due to a migraine presents an enormous financial burden. Migraine is vastly undertreated in Honduras.

We can provide many of the neurologic and psychiatric medications, although the Honduran health system does provide basic drugs for neurologic disorders. In this clinic, we provide about 19 neurologic and psychiatric medications. We try to choose medications that are relatively safe and do not require blood testing. They also must be available in Honduras. Although Dr. Robbins can obtain the medications in the U.S., when we run short, we purchase them in Honduras until we can get resupplied from the U.S. Many of the medications are expensive in Honduras.

In summary, this survey indicates a high degree of satisfaction with a rural clinic that provides basic neurologic and psychiatric care. Even though technology and advanced laboratory tests are scarce, the patients greatly appreciate being able to see a neurologist or psychiatrist. The free medications are also a vital part of their care. By providing basic neurologic and psychiatric care, we can significantly improve quality of life.•

Kaitlyn Alleman is a medical student at Rosalind Franklin University in Chicago. Lawrence Robbins is an associate professor of neurology at the Chicago Medical School. Genesis Mejias, MD, is a physician from Venezuela. Sofia Dubon, MD, is a neurologist in Tegucigalpa, Honduras. Nelson Betancourt, MD, is a neurologist in Tegucigalpa, Honduras.

DR. MESHRAM

continued from page 1

Neurology as a national delegate in seven WFN Council of Delegates meetings. He also served the WFN as a member of its Constitution and Bylaws Committee for three terms and as a member of the Scientific Program Committee for two terms.

Dr. Meshram served the Indian Academy of Neurology (IAN) as a member of its executive committee, secretary, and then as president. He was instrumental in transforming the scientific program for the IAN annual conferences. The academy conferred on him Fellow of Indian Academy of Neurology (FIAN) status in 2012.

Known for his phenomenal organizational capabilities, he successfully assembled the 12th Annual Conference of the Indian Academy of Neurology in 2004 in Nagpur, and the first International Tropical Neurology Conference in 2017 in Mumbai. He was co-chair of the Second International Tropical Neurology Conference in 2018 in Sao Paolo, Brazil. As a course director, he organized 16 sessions of a unique education activity — the WFN-IAN-FINE Neuro Infection Series, and 13 sessions of the Inspiring People in Neurosciences Series, a first-of-its-kind activity by WFN.

Dr. Meshram is the WFN representative for the Western Pacific region of the World Health Organization. He was co-editor of a special issue of the *Journal of Neurological Sciences* that focused on tropical neurology. He is a section editor of the *Encyclopedia of Neurosciences* for the section on bacterial and fungal infections, including tropical diseases, and is assistant editor of the international journal *eNeurologicalSci*. He also serves on the editorial board of the *Journal of Neurosciences*. He is a member of the infectious disease panel of the European Academy of Neurology.

Dr. Meshram is passionate about public awareness programs and has promoted them for more than 30 years through meetings, radio talks, television, and newspapers. During his 10 years as a chief coordinator for public health education and awareness activities for IAN, he organized programs throughout the country. He developed and furthered several highly acclaimed programs, including "Music, Masala, and Brain," a sports meet for people with neurological disorders, and painting competitions for school children to raise awareness about the importance of autism, brain health, CNS tuberculosis, dementia, the environment, epilepsy, headache, multiple sclerosis, Parkinson's disease, and stroke.

He has published more than 450 newspaper articles for public awareness and contributes regularly to *World Neurology*. He also published a book containing children's paintings themed on brain disorders.

Dr. Meshram has received other awards, including the Samman Award, conferred on him by the Indian Income Tax Department. He was presented with the Rashtrasant Tukadoji Maharaj Jeevan Sadhana Award in 2017, the highest honor of Rashtrasant Tukadoji Maharaj Nagpur University. He was nominated as brand ambassador of Nagpur by the Nagpur Municipal Corporation for Swachh Bharat Abhiyan (Clean India Mission). The Indian Medical Association presented him with the Dr. Wankar Gold Medal and Lifetime Achievement Award in 2019.

He is a trustee of Baba Amte's, Maharogi Sewa Samiti, and Vidarbha Sahitya Sangh, a literary and cultural organization. He is the founder and president of the Samyak Medical Foundation, which provides scholarships to meritorious students from low-income areas encouraging them to pursue a higher education. He is also the founder and president of the Orange City Cultural Foundation and has organized six Orange City international film festivals.

Dr. Meshram has been well supported by his family, colleagues, well-wishers, media, and grateful patients. He has the unconditional support of his loving wife Namrata. The couple is blessed with two sons, Aashay and Aviral. Aashay lives in Vancouver and is excelling in his profession as an animation designer, while Aviral is doing a residency in neurology. Dr. Meshram's father, Dr. Mahadeorao Meshram, was conferred with the national lifetime achievement award, Vayoshrestha Samman, by the Honorable President of India in 2017, for his outstanding and selfless service for the elderly.

Dr. Meshram (left) receiving the 2024 Padma Shri Award from Droupadi Murmu, the Honorable President of India.

Dr. Meshram richly deserves this Padma Shri award. It will undoubtedly inspire future generations of neurologists and promote the growth of neurology in India and other parts of the world. •

Dr. Gagandeep Singh, DM, FRCP, FAMS, is the past president of the Indian Academy of Neurology

Multiple Sclerosis Surveys, Research, and Neurology News

The activities of the International Danube Neurology Symposium for Neurological Sciences and continuing education.

BY PROF. LÁSZLÓ VÉCSEI

The Symposium for Multiple Sclerosis (SMS), under the auspices of the International Danube Neurology Symposium for Neurological Sciences, has organized an international survey related to the Multiple Sclerosis (MS) Registry in different countries. It includes approximately 107 million people.

LÁSZLÓ VÉCSEI

The findings from the international data have been published in the January 2023 edition of **Multiple Sclerosis and Related Disorders**. Furthermore, the Hungarian data is available in **PLoS One**. (See the abstract "**Real-World Operation of Multiple Sclerosis Centers in Central-Eastern European Countries Covering 107 Million Inhabitants.**"

We are currently working on two more MS surveys about neuroimaging and special molecular biomarkers in the cerebrospinal fluid.

In the future, we plan to organize similar research surveys related to other neurological disorders, such as migraine and extrapyramidal diseases.

In recent years, we have established the Danube Neuroscience Research Laboratory network. Under its auspices, we focus on the pathomechanisms of neurological disorders in in vitro experiments, animal research, and clinical studies. In doing so, we aim to create a collaboration between different research activities.

We also publish the *Danube Neurology Newsletter*. It contains summaries of the present and future activities of the Danube Symposium, important news (for example WFN news, international neurology news, and national neurological activities), and reports or advertisements about international congresses. •

Prof. László Vécsei is general secretary of the International Danube Neurology Association of Central and East Europe, and head of the Neuroscience Research Group in the department of neurology at the University of Szeged Faculty of Medicine in Szeged, Hungary.

World Brain Day 2024 in China

On the occasion of World Brain Day (WBD) 2024, a brain health conference was held July 20-21, 2024, at the China National Convention Center in Beijing. The conference was centered on the theme of "World Brain Day 2024: Brain Health and Prevention." The goal was to enhance public awareness of brain health, foster scientific advancement in brain health, and prevent and treat significant neurological and psychiatric disorders.

Read more about this conference in the upcoming WFN Service Page in the *Journal of the Neurological Sciences*. •

Expanding IGAP in Latin America


IGAP Santo Domingo.

BY PROF. RENATO VERDUGO AND PROF. MARCO T. MEDINA

The Intersectional Global Action Plan (IGAP) Latin American workshop took place June 13, 2024, in Santo Domingo, Dominican Republic. IGAP is a worldwide plan to combat neurological diseases through 2031. It was launched by the WHO in 2022.

The event in Santo Domingo was organized by the Chilean League Against Epilepsy and the Autonomous University of Honduras, with the support of the Pan-American Health Organization (PAHO). The meeting was directed by Profs. Carlos Acevedo and Keryma Acevedo from Chile and Prof. Marco Tulio Medina from Honduras. Dr. Carmen Martinez-Viciana attended on behalf of PAHO.

The World Federation of Neurology (WFN) was present through the participation of the president of the Pan-American Federation of Neurological Societies (PAFNS) and the regional division of the WFN for Latin America and Caribe Prof. Renato Verdugo of Chile, PAFNS Past President Prof. Marco Tulio Medina, and PAFNS Vice President Prof. Fernando Cendes of Brazil.

The meeting was successful regarding attendance and the relevance of the discussion. The overall theme was "IGAP: Challenges for its Implementation in Latin America." Several topics were discussed, including:

- Knowing IGAP, its scope, implications, relevance, and indicators
- Identifying priorities and regional leaderships
- Promoting regional development, sharing successful local strategies, and exchanging ideas to promote IGAP in the Latin American region
- Generating actions and technical visions that may be implemented to support the region locally
- Generating an epilepsy work model that includes stakeholders in Latin America

Prof. Verdugo gave a talk describing some of the most prevalent and growing neurological disorders in Latin America, with a focus on stroke and dementia. After a general conference, the participants were divided into groups that discussed the different subjects and presented their conclusions.

Ultimately, the meeting drew attention to the need to establish a Latin American regional IGAP group between the WHO/PAHO, regional WHO Collaborating Centers, the International Bureau of Epilepsy, and PAFNS/EFN. •

Prof. Renato Verdugo is president of the Pan-American Federation of Neurological Societies (PAFNS) and Prof. Marco Tulio Medina is past president of PAFNS and former co-opted trustee of the WFN.


(Left to right) Profs. Fernando Cendes, Renato Verdugo, and Marco Tulio Medina.


Working in small groups.

TUBERCULOSIS

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monitoring for adverse drug reactions and prompt management are also crucial aspects of care.[14]

The success of CNS-TB treatment is highly contingent on timely intervention. Several factors influence the prognosis, with the clinical stage at initial presentation being the most important determinant. If left untreated or unrecognized, this disease can unfortunately lead to fatality within five to eight weeks of the onset of symptoms.[15] •

Mohammad Wasay is Alicharan Endowed professor of neurology at Aga Khan University, past president of the Pakistan Society of Neurology and Pakistan Stroke Society, president of the Neurology Awareness and Research Foundation, trustee and chair of the Specialty Groups Committee of World Federation of Neurology (WFN), secretary of the Environmental Neurology specialty group of WFN, member of the Global Policy Committee of the World Stroke Organization (WSO), and editor of the *Pakistan Journal of Neurological Sciences*. Dr. Safa Younis completed her bachelor's in medicine and surgery (MBBS) from Ziauddin Medical University, and is actively involved in raising awareness and promoting brain wellness within the community.

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Prof. Gallo Diop receives the acknowledgement from WFN President Prof. Wolfgang Grisold.

PRESIDENT'S COLUMN

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events. Each day will conclude with six teaching courses in the afternoon. These will focus on important topics such as stroke, epilepsy, neuromuscular disorders, headache, the autonomic system, and the emerging topic of neuroepidemiology. All registered participants will be able to see all six teaching courses.

For October, we plan a joint session with the World Stroke Organization (WSO) at the **World Stroke Congress** in Abu Dhabi. The session will focus on palliative care in stroke, which confirms the WFN's major interest in disability, long-term care, and palliative care.

The **International Congress on Neuromuscular Diseases (ICNMD)**, the WFN's neuromuscular congress, will be held Oct. 25 in Perth, Australia. After circulating the globe, the ICNMD has found excellent hosts in Perth and will present a congress incorporating all parts of the neuromuscular system, such as motor neuron disease, peripheral nerves, neuromuscular transmission, and muscle. We expect an exciting program. For those unable to travel to this destination, we will provide a virtual program that will cover the highlights.

Jointly with the International Headache Society, Global Patient Advocacy Coalition, the American Migraine Foundation, and the African Academy of Neurology (AFAN), we will continue our e-learning days on headache. The next session, Education in Headache to Health Care Professionals in Africa, is planned for Nov. 23, 2024. **Register** for the free session.

Early in 2025, we will have a joint educational day with the Asian and Oceanian Association of Neurology (AOAN) on movement disorders, autoimmune diseases, and the brain.

We supported and attended the July meeting of AFAN in Dakar. There was a joint education session with AFAN on Africa, and Prof. Gallo Diop was honored by the WFN.

We also conducted a site visit at our successful WFN Training Center in Dakar. Interviews with the staff and the trainees confirmed the high level of the training center. Please read more on the educational situation in the WFN service pages in the *Journal of the Neurological Sciences*.

The WFN continuously offers positions for training in our WFN Training Centers. For Cape Town, a new four-year training position was announced in July 2024. The position generated 165 applications, which is a new record of interest.

Jointly with the AAN, the WFN is developing a global program for Advocacy and Leadership for low middle and low income countries. You can find more information on the **WFN website**.

Please follow our **website**, **social media**, and the **JNS WFN service page** for more news from WFN. •

(Left to right) Prof. M. Benabdeljlil, Prof. Riadh Gouider, Natacha Kiswendsida (epilepsy trainee), Prof. Wolfgang Grisold, and Dr. Steven Lewis.

(Left to right) Prof. M. Benabdeljlil, Prof. Riadh Gouider, Dr. Mundih Njohjam (epilepsy trainee), Prof. Wolfgang Grisold, and Dr. Steven Lewis.

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AFAN group photo after the closing ceremony.

WFN JUNIOR TRAVELING FELLOWSHIP 2024

Reports of Attendance at the AFAN and ASN Congresses

Both of this issue's Junior Traveling Fellowship recipients attended the Fourth Congress of the African Academy of Neurology (AFAN), held in conjunction with the Fifth Congress of the Association Senegalese of Neurology (ASN), July 11-17, in Dakar, Senegal. Each brings their own perspective on what they saw and did during the meeting.

Mahamadou Kotioumbe

My participation in the joint congress was made possible by the WFN Junior Traveling Fellowships Grant awarded by the World Federation of Neurology (WFN).

The congress included the Movement Disorders Society (MDS) course, the main congress sessions, and the Teaching Courses.

MDS Course

The MDS course covered a range of topics in movement disorders, including:

- Parkinson's disease: Advances in diagnosis, including genetic aspects, treatment, and management
- Management of atypical Parkinsonian syndromes
- Hyperkinetic movement disorders: Diagnosis, management, and treatment
- Treatable movement disorders

There were a number of take-home messages from the course, including the importance of early and accurate diagnosis in improving patient outcomes. We also learned about novel therapeutic strategies, including deep brain stimulation and pharmacological interventions. And there was much said about the role of genetics in movement disorders and the potential for personalized medicine.

Congress Sessions

The main congress sessions featured plenary lectures, oral presentations, and poster sessions on various neurological conditions. The key topics included sleep disorders, stroke, and headaches. Epilepsy, neuroinfectious diseases, and neuro-environment diseases were also covered. I also had the opportunity to present an oral communication, titled "Unusual Presentation of Intracerebral Hemorrhage: A Report From Mali."

Teaching Courses

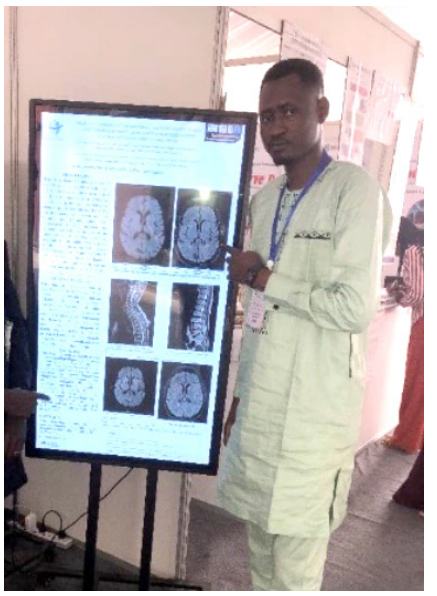
The Teaching Courses focused on practical skills and knowledge essential for neurologists in the region.

Sessions included:

- Neuropathies, clinical neurological examination, and EMG
- Practical approaches in resource-constrained environments to autoimmune encephalopathies, HIV-related CNS infections, status epilepticus, and stroke.
- Guidance on writing a scientific article, research project, leadership, and networking

Students came away from the courses with improved proficiency in conducting comprehensive clinical neurological examinations and using EMG for diagnosing neuropathies. We also gained practical approaches for managing critical neurological conditions in resource-constrained environments, such as utoimmune encephalopathies, HIV-related CNS infections, status epilepticus, and stroke. Finally, we received guidance on writing scientific articles and research projects, which is crucial for contributing to the body of neurological research.

Movement Disorders Society course on Day 1.




Carlos Othon Gueingar

(Left to right) Prof. Wolfgang Grisold, Mahamadou Kotioumbe, and Prof. Riadh Gouider.

Mahamadou Kotioumbe gives an oral presentation of his research, "Unusual Presentation of Intracerebral Hemorrhage: A Report From Mali."

Networking and Collaborations

The congress provided an excellent platform for networking with neurologists from around the world. I had the opportunity to meet and interact with leading experts, including:

Prof. Amadou Gallo Diop, Prof. Osheik Seidi, Prof. Riadh Gouider, Prof. Wolfgang Grisold, and many others.

Acknowledgments

Attending the joint congress of the AFAN and the ASN was an invaluable experience. It significantly enhanced my knowledge and skills, provided opportunities for networking and collaboration, and inspired new ideas for future research and clinical practice.

I would like to extend my sincere gratitude to the World Federation of Neurology for the travel grant, which made this enriching experience possible, to the organizers of the congress, and to all of the professors and colleagues I had the pleasure of meeting and learning from during this conference.

Carlos Othon Gueingar

It was a great privilege for me to participate in the Fourth Congress of the African Academy of Neurology (AFAN), held in conjunction with the Fifth Congress of the Association Senegalese of Neurology (ASN).

The meeting featured an exciting mix of eminent speakers from English- and French-speaking Africa, as well as from Europe and the U.S.

During the meetings, I had the opportunity to present my work on gait disorders revealing a probable sporadic form of Creutzfeldt-Jakob disease, which was diagnosed in the neurology department of the Center Hospitalier de Montluçon.

I also discussed the burden of neurological diseases in Africa. Sleep disorders, strokes, and headaches are real public health problems. The first days of the congress were rich in themes focusing on abnormal movements in neurological conditions. This was organized by the International Parkinson and Movement Disorder Society – African Section (MDS-AS). At the end of the post-congress session, we also enjoyed presentations on neurophysiology, followed by a visit to the MDS neurophysiology training center.

I would like to thank the World Federation of Neurology (WFN) for the Junior Traveling Fellowship that granted me this opportunity, which enabled me to travel, present my work, and forge relationships with our neurophysiological colleagues.

Thanks also to the organizers of the ASN and AFAN. •

Mahamadou Kotioumbe is a neurology resident from Mali. Carlos Othon Gueingar is a young neurologist from Chad.