P R O G R A M

ANA Global Neurology VIRTUAL SYMPOSIUM



December 2-3, 2024







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Advancing science, education, and careers to improve neurologic health for all.

VISION

A world without neurological disease.

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Our work is guided by the following principles:

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.....
Excellence across all programs and publications
.....
Community growth and cohesion

Expanding diversity and ensuring inclusion

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MONDAY, DECEMBER 2, 2024

At the conclusion of this activity, attendees should be able to:

- Discuss ongoing issues related to neurologic care and research in Low- and Middle-Income Countries.
- Identify best practices to address gaps in neuroscience research capacity building in Low- and Middle-Income Countries.
- Develop a broad-based understanding of the practice of neurology in Low- and Middle-Income Countries.

TUESDAY, DECEMBER 3, 2024

At the conclusion of this activity, attendees should be able to:

- Understand and apply technical writing skills to produce clear, logical, and grammatically correct scientific manuscripts.
- Describe the fundamentals of conducting neurological research in resource-limited settings.
- Identify funding opportunities for researchers in Low- and Middle-Income Countries.



Day 1 of the program offers CME credit. You will have an opportunity to complete an evaluation for the entire meeting and claim CME, if desired, by visiting the ANA's OnDEC website: http://education.myANA.org

PURPOSE/LEARNING OUTCOME

Following this activity, the ANA expects learners to share how they will change their research based on new knowledge or skills reviewed during the sessions.

ACCME ACCREDITATION & AMA DESIGNATION STATEMENTS

The American Neurological Association is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The American Neurological Association designates this live activity for a maximum of **2.5** *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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FINANCIAL DISCLOSURE STATEMENTS

The planners and faculty for this activity do not have any relationships to disclose. Any relevant relationships with ACCME-defined <u>ineligible companies</u> are mitigated according to ACCME Standards prior to the start of the activity.



9:00 AM	WELCOME & OPENING REMARKS M. Elizabeth Ross, MD, PhD, FANA President, American Neurological Association Nathan Cummings Professor and Head, Laboratory of Neurogenetics and Development Director, Center for Neurogenetics Weill Cornell Medicine
9:05 AM	SYMPOSIUM OVERVIEW & KEYNOTE SPEAKER INTRODUCTION Omar Siddiqi, MD, MPH, FANA Chair, ANA Global Engagement Committee Director, Global Neurology Program Department of Neurology Center for Virology and Vaccine Research Department of Internal Medicine Beth Israel Deaconess Medical Center Associate Professor of Neurology, Harvard Medical School Visiting Lecturer, University of Zambia School of Medicine
9:15 AM	KEYNOTE ADDRESS Tarun Dua, MD, MPH Unit Head of Brain Health Unit, Department of Mental Health and Substance Use, World Health Organization
9:35 AM	Q&A Omar Siddiqi, MD, MPH, FANA
9:50 AM	BREAK
10:05 AM	SPEAKER INTRODUCTION M. Elizabeth Ross, MD, PhD, FANA

AGENDA CONTINUED Monday, December 2

	RISK FACTORS AND OUTCOMES OF DELIRIUM IN HOSPITALIZED OLDER GHANAIANS
	John-Paul Omuojine, MBChB, FWACP (Psych)
10:07 AM	Senior Specialist/Lead Clinician Psychiatry Unit, Komfo Anokye Teaching Hospital, Ghana
	Part-Time Asst. Lecturer, Department of Behavioural Sciences, SMD-KNUST Komfo Anokye Teaching Hospital, Ghana
	Norme Anonge reaching riespital, oriana
10:17 AM	Q&A
10.17 7 (14)	M. Elizabeth Ross, MD, PhD, FANA
10.22 414	SPEAKER INTRODUCTION
10:22 AM	Omar Siddiqi, MD, MPH, FANA
	MIGRAINE AND SLEEP QUALITY AMONG UNDERGRADUATE
10:24 AM	MEDICAL STUDENTS: A CROSS-SECTIONAL STUDY
10.24 AIVI	Sai Lavanya Patnala, MBBS
	Apollo Institute of Medical Sciences and Research, Hyderabad, India
10:34 AM	Q&A
10.54 AM	Omar Siddiqi, MD, MPH, FANA
10.70 414	SPEAKER INTRODUCTION
10:39 AM	M. Elizabeth Ross, MD, PhD, FANA
	BRIDGING THE EPILEPSY TREATMENT GAP: IMPACT OF AN
	EPILEPSY CLINIC IN A RURAL COMMUNITY WITH HIGH EPILEPSY PREVALENCE IN CAMEROON
10:41 AM	Mundih Njohjam, MD, MSc
	Neurology Resident
	University of Cheikh Anta Diop, Senegal
10.51 414	Q&A
10:51 AM	M. Elizabeth Ross, MD, PhD, FANA
	SPEAKER INTRODUCTION
10:56 AM	Omar Siddigi, MD, MPH, FANA

AGENDA CONTINUED Monday, December 2

10:58 AM	LONG-TERM EFFICACY AND SAFETY OF ENDOVASCULAR THROMBECTOMY IN ISCHEMIC STROKE: A SYSTEMATIC REVIEW AND META-ANALYSIS Sufyan Shahid Khawaja Muhammad Safdar Medical College, Pakistan
11:08 AM	Q&A Omar Siddiqi, MD, MPH, FANA
11:13 AM	SPEAKER INTRODUCTION M. Elizabeth Ross, MD, PhD, FANA
11:15 AM	SLEEP WELL FOR A BETTER WORLD: THE RISING PREVALENCE OF SLEEP DISORDERS AMONG YOUNG PROFESSIONALS – A GROWING HEALTH CONCERN Ganga Putchala, MBBS Guntur Medical College, India
11:25 AM	Q&A M. Elizabeth Ross, MD, PhD, FANA
11:30 AM	SPEAKER INTRODUCTION Omar Siddiqi, MD, MPH, FANA
11:31 AM	BRAIN HEALTH AND AWARENESS OF BRAIN-RELATED DISORDERS AMONG YOUNG PEOPLE IN CAMEROON Mundih Njohjam, MD, MSc Neurology Resident University of Cheikh Anta Diop, Senegal
11:41 AM	Q&A Omar Siddiqi, MD, MPH, FANA
11:46 AM	ADDITIONAL QUESTIONS FOR SPEAKERS Omar Siddiqi, MD, MPH, FANA
11:58 AM	CLOSING REMARKS M. Elizabeth Ross, MD, PhD, FANA
12:00 PM	ADJOURN



9:00 AM	WELCOME & SESSION OVERVIEW Deanna Saylor, MD, MHS Associate Professor of Neurology and Director of the Global Neurology Program and Global Neurology Fellowship, Johns Hopkins University School of Medicine
9:02 AM	SPEAKER INTRODUCTION Deanna Saylor, MD, MHS
9:04 AM	GETTING STARTED: CONDUCTING RESEARCH IN LIMITED RESOURCE SETTINGS (PERU) Joseph Zunt, MD, MPH, FANA Professor, Global Health Professor, Neurology Adjunct Professor, Epidemiology Adjunct Professor, Medicine - Allergy and Infectious Disease University of Washington
9:19 AM	SPEAKER INTRODUCTION Deanna Saylor, MD, MHS
9:21 AM	GETTING STARTED: CONDUCTING RESEARCH IN LIMITED RESOURCE SETTINGS (INDIA) Usha Kant (UK) Misra, MD, DM, FANA Professor Emeritus, T.S. Misra Medical College and Hospital, India Director Neurosciences, Apollomedics Super Specialty Hospital, India Consultant, Vivekananda Polyclinic, Lucknow, India
9:36 AM	SPEAKER INTRODUCTION Deanna Saylor, MD, MHS

AGENDA CONTINUED Tuesday, December 3

9:38 AM	GETTING STARTED: CONDUCTING RESEARCH IN LIMITED RESOURCE SETTINGS (ZAMBIA) Omar Siddiqi, MD, MPH, FANA Chair, ANA Global Engagement Committee Director, Global Neurology Program Department of Neurology Center for Virology and Vaccine Research Department of Internal Medicine Beth Israel Deaconess Medical Center Associate Professor of Neurology, Harvard Medical School Visiting Lecturer, University of Zambia School of Medicine
9:53 AM	Q&A Deanna Saylor, MD, MHS
10:00 AM	BREAK
10:15 AM	SESSION OVERVIEW Omar Siddiqi, MD, MPH, FANA
10:18 AM	SPEAKER INTRODUCTION Omar Siddiqi, MD, MPH, FANA
10:20 AM	ESSENTIALS OF WRITING SCIENTIFIC PAPERS Kenneth L. Tyler, MD, FANA Editor-in-Chief, Annals of Neurology Associate Editor, Journal of Neurovirology Louise Baum Endowed Chair of Neurology Professor of Medicine and Immunology-Microbiology University of Colorado School of Medicine
10:45 AM	Q&A Omar Siddiqi, MD, MPH, FANA

AGENDA CONTINUED Tuesday, December 3

11:15 AM	BREAK
11:30 AM	SESSION OVERVIEW & SPEAKER INTRODUCTION Monica Diaz, MD, MS Assistant Professor of Neurology Division of Multiple Sclerosis & Neuroimmunology University of North Carolina at Chapel Hill School of Medicine
11:34 AM	FUNDING OPPORTUNITIES FOR RESEARCHERS IN LMICS Richard T. Benson, MD, PhD Director, Office of Global Health and Health Disparities (OGHHD) National Institute of Neurological Disorders and Stroke National Institutes of Health
11:49 AM	SPEAKER INTRODUCTION Monica Diaz, MD, MS
11:51 AM	FUNDING OPPORTUNITIES FOR RESEARCHERS IN LMICS Fred Stephen Sarfo, MD, PhD, FWACP, FGCP, FANA Professor of Medicine & Vice Dean, Kumasi Kwame Nkrumah University of Science and Technology School of Medical Sciences Consultant Neurologist, Komfo Anokye Teaching Hospital, Ghana
12:06 PM	Q&A Monica Diaz, MD, MS
12:25 PM	CLOSING REMARKS Omar Siddiqi, MD, MPH, FANA
12:30 PM	ADJOURN





Tarun Dua, MD, MPH

Unit Head of Brain Health Unit, Department of Mental Health and Substance Use, World Health Organization

Dr. Tarun Dua is the Unit Head of Brain Health Unit in the Department of Mental Health and Substance Use at World Health Organization Headquarters. The aim of the unit is to promote optimal brain development, cognitive health and wellbeing for all, and prevention and management of neurological disorders across the life-course.

The unit is responsible for coordinating the implementation of the intersectoral action plan on epilepsy and other neurological disorders.

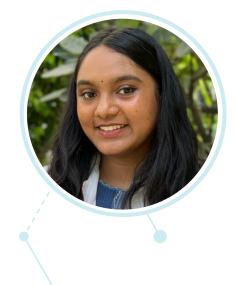
John-Paul Omuojine, MBChB FWACP (Psych)

Senior Specialist/Lead Clinician Psychiatry Unit, Komfo Anokye Teaching Hospital, Ghana

Part-Time Asst. Lecturer, Department of Behavioural Sciences, SMD-KNUST, Ghana

Dr. Omuojine is a General Adult Psychiatrist and the Lead Clinician at the Psychiatry Unit at Komfo Anokye Teaching Hospital in Kumasi Ghana. He is a 2024-2025 Fogarty International Fellow affiliated with the University of Michigan. He is an early career clinician-researcher who is passionate about major neurocognitive disorders research and improving older adult brain health in sub-Saharan Africa. He also serves as the secretary of the Ghanaian chapter of the Faculty of Psychiatry of the West-African College of Physicians and as a part-time assistant lecturer at Kwame Nkrumah University of Science and Technology, Kumasi.

SPEAKERS CONTINUED Monday, December 2



Sai Lavanya Patnala, MBBS

Apollo Institute of Medical Sciences and Research, Hyderabad, India

Lavanya Patnala is a recent medical graduate from Hyderabad, India. Her passion for biology, during high school, led her to pursue medicine. During medical school, she developed a particular interest in neurology. She has gained significant clinical experience as a medical student in neurology both in India and the US. Her research interests mainly include stroke neurology and sleep medicine. An enthusiastic cook and baker, Lavanya aims to incorporate these interests into promoting mindful nutrition and healthy lifestyle habits through content creation. She aspires to become a well-rounded physician and to advance the field of neurology through research and education.



Neurology Resident University of Cheikh Anta Diop, Senegal

Dr. Mundih Njohjam is a trainee neurologist from Cameroon who is driven by the desire to improve neurological care in resource-limited settings with a particular focus on rural areas. When not seeing patients, she is actively working to improve community awareness of neurological disorders and brain health. She is a world federation of Neurology and American Academy of Neurology scholar. She has received both national and international recognition for her community engagement activities aimed at improving access to neurological care, awareness of neurological disorders and brain health.



SPEAKERS CONTINUED Monday, December 2



Sufyan Shahid

Final Year MBBS Student, Khawaja Muhammad Safdar Medical College, Sialkot, Pakistan

Sufyan Shahid is a final-year medical student at Khawaja Muhammad Safdar Medical College (KMSMC) in Pakistan with a deep commitment to neurology and clinical research. Driven by a passion for advancing knowledge in neurological disorders, Sufyan has contributed to multiple research projects and has presented findings at both national and international conferences. In addition to his academic pursuits, he is a dedicated writer, frequently publishing articles on a range of topics, and actively volunteers in community health initiatives. Known for balancing a rigorous academic workload with a variety of extracurricular engagements, Sufyan brings enthusiasm, curiosity, and a dedication to lifelong learning to all he undertakes.



Ganga Putchala, MBBS

Guntur Medical College, India

Dr. Gagana Putchala pursued her MBBS from Guntur Medical College, India. She undertook her internship at a state government referral hospital, Government General Hospital, Guntur. During her graduation, she worked as a research student, focusing on the improvement of healthcare with a special interest in emerging technologies in neuroscience. She published two articles in esteemed journals, showcasing her dedication to advancing neuroscience knowledge. She also completed 16 weeks of clinical experience in the United States. These interests demonstrate her passion and dedication for neuroscience. She aspires to be a neurologist to provide comprehensive care for her patients.





M. Elizabeth Ross, MD, PhD, FANA

President, American Neurological Association Nathan Cummings Professor and Head, Laboratory of Neurogenetics and Development Director, Center for Neurogenetics Weill Cornell Medicine

M. Elizabeth Ross, MD, PhD, FANA, is the Nathan Cummings Professor of Neurology and Neuroscience. She Directs the Center for Neurogenetics (CNG) and Chairs the Neuroscience Graduate Program at Weill Cornell Medicine (WCM). The CNG in the Brain and Mind Research Institute at WCM supports research into the genetic causes of neurological disorders in children and adults. The Center has both basic science and clinical arms, evaluating patients with neurological disorders due to a single gene mutation or requiring multi-gene interactions to manifest.

The CNG operates a patient DNA and cell biobank that supports translational research across the neurological community at Weill Cornell. Neuroscientist faculty in the Center investigate the mechanisms underlying pathogenesis of brain diseases. Her own research group, the Laboratory of Neurogenetics and Development, focuses on gene mutations associated with structural malformations of CNS, developmental disorders and neurodegeneration. Major themes encompass: complex genetics of spina bifida; cell cycle regulation and its role in growth and cellular patterning of brain; and regulation of neuronal movement, connectivity, and synapse dynamics critical to the function of developing and aging brain. These three areas of study are approached using biochemical, cell biological, human stem cell and mouse genetic tools. coupled with clinical genetics, to pursue how sequence variation-in one or multiple genes together-causes impaired brain function.

Her current national service includes as an editorial board member of Annals of Neurology and Neurology Genetics, Chair of the NIH-CHHD-C study section, and President of the American Neurological Association.

MODERATORS CONT. Monday, December 2



Omar Siddiqi, MD, MPH, FANA

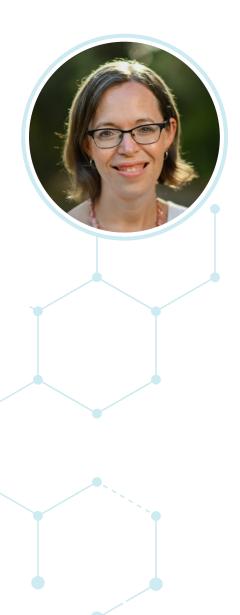
Chair, ANA Global Engagement Committee

Director, Global Neurology Program
Department of Neurology
Center for Virology and Vaccine Research
Department of Internal Medicine
Beth Israel Deaconess Medical Center

Associate Professor of Neurology, Harvard Medical School Visiting Lecturer, University of Zambia School of Medicine

Dr. Omar Siddiqi is an Associate Professor of Neurology at Beth Israel Deaconess Medical Center, Harvard Medical School. He was based full-time at the University of Zambia School of Medicine from 2010 – 2021 where he continues to hold an appointment as Visiting Lecturer. Dr. Siddiqi's research attempts to understand the disease burden of central nervous system opportunistic infections in HIV-infected Zambian adults. He is one of the founding members of the Zambia Institute of Neurological Care, Research, and Education (ZINCARE).





Deanna Saylor, MD, MHS

Associate Professor of Neurology and Director of the Global Neurology Program and Global Neurology Fellowship, Johns Hopkins University School of Medicine

Dr. Deanna Saylor is a neuro-infectious diseases specialist, Associate Professor of Neurology and Director of the Global Neurology Program and Global Neurology Fellowship at the Johns Hopkins University School of Medicine, where she also completed her medical school education and neurology training. Her clinical and research interests include neurological complications of HIV, global health and neurology, and improving the diagnosis and management of neurological conditions in resource-limited settings, particularly in regards to stroke. Most recently, Dr. Saylor has been living and working full-time in Zambia as Director of the first and only neurology post-graduate training program in Zambia. She also led the development of the first stroke unit in the country, which opened in October 2023 at the University Teaching Hospital in Lusaka and has been a leader in efforts to develop teleneurology services in Zambia and improve undergraduate medical education through the use of the flipped classroom to teach neurology. She is an active member of the African Stroke Organization and a founding member of the African Committee for Treatment and Research in Multiple Sclerosis.



Joseph Zunt, MD, MPH, FANA

Professor, Global Health Professor Neurology Adjunct Professor Epidemiology Adjunct Professor Medicine - Allergy and Infectious Disease University of Washington

Dr. Joe Zunt completed medical school at the University of Minnesota, followed by neurology residency, an infectious diseases fellowship and Master of Public Health (MPH) at the University of Washington. His research in Peru began in 1996 when he was an infectious diseases fellow examining the neurologic manifestations of HTLV-1 infection in female sex workers. This research lead to projects examining other sexually transmitted retroviral infections and co-infections in indigenous populations, as well as infections of the central nervous system, especially herpes simplex virus (HSV), tuberculosis and neurocysticercosis. Dr. Zunt and his team developed a nationwide surveillance in five Peruvian cities to define etiologies of meningitis and encephalitis -finding the majority of identified causes of encephalitis were due to HSV infection, this study provided intravenous acyclovir to study participants and led to the introduction of acyclovir onto the Peruvian Ministry of Health's list of approved medications for treatment of HSV encephalitis.

He remains clinically active at Harborview Medical Center, the county hospital managed by the University of Washington and spends the majority of his time training the next generation of global health researchers. He co-directs three NIH-funded D43 research training programs and since 2004 has mentored over 100 US and Peruvian medical students and physicians who have completed 11 to 12-month research projects in Peru, many of whom have also received an MPH at the University of Washington or in Peru. The largest program he directs, the Northern Pacific Global Health Consortium of the NIH Fogarty LAUNCH Program, has supported research training of over 250 US and LMIC doctoral students and postdoctoral trainees in 10 countries. Through NIH-supported programs, Dr. Zunt has participated in the development of syllabi, workshops and hybrid on-line/in-person trainings to improve research methodology and priorities, research ethics, capacity building and mentorship training across the globe.



Usha Kant (UK) Misra, MD, DM, FANA

Professor Emeritus, T.S. Misra Medical College and Hospital, India

Director Neurosciences, Apollomedics Super Specialty Hospital, India

Consultant, Vivekananda Polyclinic, Lucknow, India

Dr. U K Misra received an MBBS from Lucknow University in 1972, his MD from Lucknow University in 1975; and DM - Neurology from King Georges Medical College, Lucknow University in 1985.

Dr. Misra founded the department of neurology at Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, which he headed until 2017 and served as a faculty member until 2020.

He is currently a Professor Emeritus at T.S. Misra Medical College & Hospital Medical School, Director Neurosciences, Apollomedics Super Specialty Hospital, and a consultant at Vivekananda Polyclinic, Lucknow.

Dr. Misra has made significant contributions to stroke, epilepsy, neuroinfection, migraine, neurotoxicology, and neurophysiology research. He has published over 527 papers and 5 books, with citations of 21387, H index 73, and i10 index 365 (AD scientific Index).







Kenneth L. Tyler, MD, FANA

Editor-in-Chief, Annals of Neurology
Associate Editor, Journal of Neurovirology
Louise Baum Endowed Chair of Neurology
Professor of Medicine and Immunology-Microbiology
University of Colorado School of Medicine

Dr. Tyler received his BA from Harvard and MD from Johns Hopkins and trained in Medicine at the Brigham and in Neurology at MGH, followed by postdoctoral fellowship in Microbiology & Molecular Genetics at Harvard Medical School. He is the Louise Baum Endowed Chair of Neurology and Professor of Medicine and Immunology-Microbiology at the University of Colorado School of Medicine. Dr. Tyler is the current Editor-in-Chief of Annals of Neurology and an Associate Editor of the Journal of Neurology. He has served on the Editorial Boards of Neurology, JAMA Neurology, Experimental Neurology, Virology, Journal of Virology, Journal of Infectious Disease, Apoptosis and Microbial Pathogenesis.

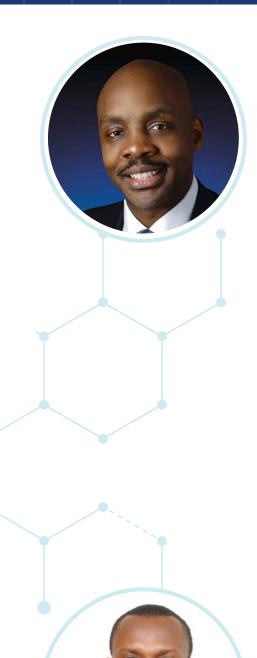


Monica Diaz, MD, MS

Assistant Professor of Neurology Division of Multiple Sclerosis & Neuroimmunology University of North Carolina at Chapel Hill School of Medicine

Dr. Diaz is an assistant professor of neurology in the Division of MS/Neuroimmunology at UNC. She is the current Vice-Chair of the Global Health section of the American Academy of Neurology and is a member of the Global Engagement Committee of the American Neurological Association. Dr. Diaz completed her neurology residency at Yale and neuro-infectious/MS/neuroimmunology fellowship at University of California, San Diego. She sees patients in the MS and transverse myelitis clinics of UNC, providing care to patients with multiple sclerosis and autoimmune and infectious diseases affecting the nervous system.

Dr. Diaz has lived and worked in Peru intermittently since 2019 leading studies in Peru and Uganda with the goal of improving neurological outcomes in Latin America, including studies on epidemiology/risk factors for dementia, cognitive impairment in Peruvians living with HIV and transverse myelitis in Peru. She is the co-director of a bilateral neurology resident rotation between UNC and Universidad Peruana Cayetano Heredia in Lima, Peru.



Richard T. Benson, MD, PhD

Director, Office of Global Health and Health Disparities (OGHHD)

National Institute of Neurological Disorders and Stroke, National Institutes of Health

Dr. Richard Benson is the Director of the "Office of Global" Health and Health Disparities" (OGHHD) at the National Institutes of Health (NIH), National Institute of Neurological Disorders and Stroke (NINDS). Dr. Benson attended Fisk University in Nashville, Tennessee and received a Bachelor of Science degree in Chemistry. He then attended Meharry Medical College and received his MD and PhD (in Neurophysiology) degrees. At Meharry, he received numerous research honors and was inducted in the Alpha Omega Alpha (AOA) national medical honor society. Subsequently, he completed a neurology residency at the Harvard-Longwood neurology residency program in Boston, Massachusetts. After that he completed a two-year neurovascular fellowship at the neurological Institute at Columbia-Presbyterian Medical Center in New York, while completing a master's degree in Epidemiology at the Columbia University, Mailman School of Public Health. Dr. Benson has worked in academia, the public, and the private sectors. Outside of his work at the NIH, he is an associate editor of DEI for the Neurology journals and is a member of the American Academy of Neurology DEI committee. His areas of interest and expertise include neurological health disparities/inequities, minority, community, and global health.

Fred Stephen Sarfo, MD, PhD, FWACP, FGCP, FANA

Professor of Medicine & Vice Dean, Kumasi Kwame Nkrumah University of Science and Technology School of Medical Sciences, Ghana

Consultant Neurologist, Komfo Anokye Teaching Hospital, Ghana

Prof. Fred Stephen Sarfo is a researcher, a clinician, and an educator. He has practiced as a Neurologist since 2010 and hold 2 doctoral degrees in Epidemiology and Molecular Medicine. He is a Professor of Medicine & Vice Dean at the KNUST, School of Medical Sciences and a Consultant Neurologist at the Komfo Anokye Teaching Hospital, Kumasi. His research interests are in stroke epidemiology and interventions, neurodegenerative disorders in the sub-Saharan African context. He has co-authored >280 publications in peer reviewed journals.

ABSTRACTS PAGE 1

Risk Factors and Outcomes of Delirium in Hospitalized Older Ghanaians

John-Paul Omuojine, MBChB, FWACP^{1,4}, Toyin Bello., MSc², Stephen Wemakor, MBChB, MGCPS³, Priscilla Kolibea Mante, BPharm, PhD⁴, George Sedinam Amponsah BSc¹, Kwabena Kusi-Mensah, MBChB, FWACP, MSc.^{1,4}, Ruth Owusu-Antwi MBChB, FGCPS⁴, Fred S. Sarfo MD, PhD, PhD⁴, Sammy Ohene MBChB, FWACP, FGCPS⁵, Akin Ojagbemi, MBBS, PhD, MSc²

- ¹ Psychiatry Unit, Komfo Anokye Teaching Hospital, Kumasi, Ghana
- ² Department of Psychiatry, World Health Organization (WHO) Collaborating Centre for Research and Training in Mental health, Neuroscience, and Substance abuse, College of Medicine, University of Ibadan, Ibadan, Nigeria
- ³ Department of Psychiatry, Yale University School of Medicine, New Haven, CT, USA
- ⁴ Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
- ⁵ Department of Psychiatry, University of Ghana Medical School

OBJECTIVES

Delirium has been rarely studied in older West Africans. We sought to investigate its correlates and outcomes in hospitalized older Ghanaians.

METHODS

This was a one-month prospective observational study. Delirium prevalence was assessed within 24 h of admission using the Confusion Assessment Method (CAM). Incident delirium was determined with repeat CAM assessments on post-admission days 4, 7, 14, 21 and 28, after censoring participants with prevalent delirium. Multivariate logistic regression analyses were used to explore risk factors. Estimates of adjusted hazard ratios for mortality were derived with the discrete time version of the Cox regression model for time invariant explanatory variables.

RESULTS

Among 483 participants, 250 (51.8%, 95% CI: 47.3-56.3) had prevalent delirium while 10 of the remaining 233 (4.3%, 95% CI: 2.1-7.8) developed incident delirium. Being older than 80 years (adjusted odds ratio (OR) = 2.1, 95% CI: 1.2-3.6), having no formal education (OR = 2.2, 95% CI: 1.4-3.4), stroke (OR = 1.8, 95% CI: 1.1-3.0), infection (OR = 1.9, 95% CI: 1.2-3.0), and high Triage Early Warning Score (OR = 6.9, 95% CI: 2.5-19.0) predicted delirium. Delirium (adjusted hazard ratio (HR) = 1.8, 95% CI: 1.0-3.3) and high TEWS (HR = 4.6 (95% CI: 1.7-12.7) at baseline predicted mortality. These factors also predicted longer hospital stay.

CONCLUSION

Over half of hospital-treated older Ghanaians in the present study had delirium on the first day of admission. The syndrome prolonged hospitalization and increased mortality risk. Future studies in West Africa may investigate the epidemiology of delirium in primary care and community settings.

KEYWORDS

Africa, delirium, incident, length of stay, mortality, older adult, outcome



Migraine and Sleep Quality Among Undergraduate Medical Students: A Cross-Sectional Study

Sai Lavanya Patnala¹, Anu Mohan Das²
¹Apollo Institute of Medical Sciences and Research, Hyderabad, India
²BGS Medical College and Hospital, Bangalore, India

OBJECTIVE

To determine the prevalence of migraine and its association with sleep quality among medical students of a teaching institute in South India.

BACKGROUND

Headache is a common complaint among medical students due to stressors such as longer study period, tough syllabi, examination stress, clinical duties that embrace long on-calls, emotional challenges and exhaustion related to witnessing human misery. Severity of headache is known to be directly proportional to the negative impact caused including reduced academic performance, impaired functioning, and co-morbid psychiatric illness. Migraine disability and poor sleep quality is of particular interest due to the potential impact of the stress on learning the art of quality patient care.

DESIGN/METHODS

This was a cross-sectional analytical study conducted among 355 MBBS Students. Administered questionnaire included sociodemographic details, perceived academic stress and academic performance, characteristics of headache assessed using Migraine Screening- Questionnaire, Migraine Disability Assessment Questionnaire (MIDAS) and sleep quality assessed using Pittsburgh Sleep quality Index (PSQI). Data was analysed using SPSS-24.

RESULTS

Mean age of students was 20.41 years (SD=2.08) and majority 266(66%) were females. The Migraine prevalence among medical students was 12.2% and 70% had poor sleep quality. MIDAS Grade IV or severe disability was present among 24.4% of migraineurs. Significant factors associated with migraine in bivariate analysis included gender, perceived academic stress, known comorbidities, and long-term medication use. Known psychiatric conditions came out as an independent predictor (OR=3.765 (1.355-8.858). Although sleep quality was not found to be significant, lack of sleep (83.3%) was the most frequent trigger, followed by eye strain or excessive screen time 35(71.4%).

CONCLUSION

Migraine and poor sleep quality are of significance among medical students owing to its higher prevalence and disability. Our study provokes at creating awareness regarding the importance of good sleep hygiene, monitoring screen use, adequately managing stress and addressing psychiatric comorbidities to improve holistic well-being among medical students. Africa, delirium, incident, length of stay, mortality, older adult, outcome.



Bridging The Epilepsy Treatment Gap: Impact of An Epilepsy Clinic in a Rural Community with High Epilepsy

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INTRODUCTION

Epilepsy disproportionately affects rural communities with a wide treatment gap estimated to be about 80%. The objective of this project was to contribute to the achievement of s trategic objective 2 of the intersectoral global action plan for epilepsy and other neurological disorders (IGAP) by designing and implementing a community-based epilepsy clinic that would provide effective and timely diagnosis, treatment, and care to patients with epilepsy in a rural community with high epilepsy prevalence.

METHODS

We designed and implemented a community-based, nurse-led epilepsy clinic that provides comprehensive care, including medication management, patient education, and support services. We train and empower primary healthcare nurses to deliver epilepsy care in the community. Clinic meetings were held on a monthly basis. An epilepsy-trained physician attended each clinic session to provide oversight and guide treatment decisions. Patients were recruited to the clinic through a multistrategic approach, including community radio and church announcements, word-of-mouth referrals, and collaboration with local chiefs. On non-clinic days, new patients were seen by a nurse in a walk-in setting. Challenging cases were presented and discussed with the supervising physician. Seizure frequency, medication adherence, quality of life and healthcare utilization were assessed for each patient at baseline and at 6-month intervals over a one-year period.

RESULTS

There were 35 epilepsy patients at the inauguration of the clinic and over a period of 12 months, the patient turn-over grew from 35 to 82, with regular follow-up for 77% of the registered patients. There was a statistically significant reduction in seizure frequency (p< 0.001), severity (p=0.02) as well as improvement in medication adherence (p=0.01), and quality of life (p < 0.001). Clinic attendance rates remained high with minimal drop-outs. Knowledge about the impact of the clinic spread beyond the community with patients from surrounding areas, including major cities, seeking epilepsy treatment and care from the clinic.

CONCLUSION

The implementation of community-based, nurse-led and physician-supervised epilepsy clinics can significantly improve epilepsy management and outcomes in rural communities with high disease prevalence.



Long-term Efficacy and Safety of Endovascular Thrombectomy in Ischemic Stroke: A Systematic Review and Meta-Analysis

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BACKGROUND

Endovascular thrombectomy (EVT) improves functional outcomes at 90 days in patients of acute ischemic stroke due to large vessel occlusion. However, its long-term efficacy and safety beyond 90 days remain uncertain.

OBJECTIVE

We performed a systematic review and meta-analysis to evaluate the long-term efficacy and safety of EVT in patients of acute ischemic stroke beyond 90 days.

METHODS

We searched PubMed, Embase, and ClinicalTrials.gov until July 18, 2024, for randomized controlled trials (RCTs) comparing EVT plus medical therapy (MT) versus MT alone in patients of ischemic stroke. Primary outcomes included functional independence (mRS \leq 2), independent ambulation (mRS \leq 3), and all-cause mortality beyond 90 days. Dichotomous outcomes were pooled using risk ratio (RR) along with confidence interval (CI) on RevMan 5.4. The RoB 2.0 tool was used to assess the risk of bias.

RESULTS

Five RCTs with 1526 patients (55.3% males) were included. EVT improved independent ambulation (mRS \leq 3) (RR 1.76, CI: 1.31-2.37; P = 0.0002), functional independence (mRS \leq 2) (RR 2.41, CI: 1.52-3.83; P = 0.0002), and quality of life (SMD 0.43; CI: 0.26-0.59; P < 0.00001) beyond 90 days compared to medical treatment alone. Additionally, EVT also significantly reduced death or dependency (mRS 4-6) (RR 0.77, CI: 0.71-0.83; P < 0.00001) and all-cause mortality (RR 0.86, CI: 0.77-0.96; P = 0.005) in ischemic stroke patients. Subgroup analysis confirmed EVT's effectiveness and safety in patients with both large (ASPECTS \leq 5) and mild-to-moderate ischemic regions (ASPECTS \geq 6). All RCTs had a low risk of bias except one, which showed some concerns in the results selection domain.

CONCLUSION

EVT combined with medical care significantly improves long-term functional outcomes and reduces all-cause mortality in patients of acute ischemic stroke.

ABSTRACTS

Sleep Well for a Better World: The Rising Prevalence of Sleep Disorders Among Young Professionals – A Growing Health Concern

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BACKGROUND

Modern society functions 24 hours a day, seven days a week. Many modern jobs require a significant amount of Screen-Based Devices (SBD) time, which may have an impact on the sleep of young professionals (YP) around the world. The prevalence of insufficient sleep is high in modern society. The use of SBDs has become widespread, even in low- and middle-income countries. Light is a crucial zeitgeber that controls several biological functions, including melatonin levels.

OBJECTIVES

To identify the factors contributing to sleep disorders among YPs aged 20 to 35 in India. To explore the impact of these disorders on various aspects of YPs lives and to address these challenges.

METHODS

The study was carried out with 442 participants (208 male and 234 female), selected through a convenient sample technique. All the selected participants were YPs working in various South Indian hospitals and IT companies. Ninety-one participants were night shift YPs, whereas the remaining participants were day shift YPs. Participant's activities, such as SBD usage, and their sleep quality were assessed with a questionnaire based on the Pittsburgh Sleep Quality Index (PSQI), the Smartphone Addiction Scale-Short Version (SAS-SV), and a self-administered questionnaire. In addition, an internal consistency test was used to confirm content validity. The obtained data was analyzed using frequency, percentage, mean, and chi-square values. Subsequently, the relation between the SAS-SV score and sleep quality was evaluated with the Pearson's/Spearman's rank correlation coefficient. P <0.05 was considered statistically significant.

RESULTS

- · Average age of 442 YPs was 31.20 years.
- · Average sleep duration was 356 min/day.
- 53% of the YPs were classified as high screen time users, having an SAS-SV score greater than 97%
- $\cdot~$ 67% of the participants were identified as poor sleepers.

CONCLUSION

Sleep deprivation poses a clear threat to YPs health, not only in India but also in the world. Although lack of proper sleep affects almost all aspects of human physiology, the effects it has on neurodegenerative and psychiatric diseases may be one of the most worrisome. SBDs addiction, an emerging health concern among YPs is associated with poor sleep quality. This study found that medical YPs have poorer sleep quality than nonmedical ones. Early detection of sleep disturbances and adequate treatment is crucial not only for the overall well-being of young professionals, but also to prevent long-term repercussions that emerge as various systemic illnesses.

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Promoting Brain Health and Awareness of Brain-Related Disorders Among Young People in Cameroon

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INTRODUCTION

With the rising prevalence of neurological disorders in Sub-Saharan African countries like Cameroon, awareness-raising and education on prevention for brain health have never been more imperative. The objective of this project is to contribute to the achievement of strategic objective 3 of IGAP by promoting brain health and awareness of brain-related disorders.

METHODS

We designed a youth-driven awareness-raising initiative by recruiting and training 25 young people (with healthcare and non-healthcare backgrounds) on common neurological disorders and brain health. Following the training, the trainees organised awareness-raising activities and workshops in schools and other public places using brain models and posters to facilitate sessions.

RESULTS

Over a period of 12 months, over 10,000 students were reached with educational messages on neurological disorders and brain health, with over 200 school authorities engaged. We also observed a growing interest in neurology and neuroscience among high school students, a 25% decrease in epilepsy stigma among students, and increased presentation of patients with neurological disorders in health facilities. Using the results of the project, we engaged in local-level advocacy with school authorities and stakeholders in secondary education in the North West of Cameroon, advocating for the implementation of brain health promotion activities. Through this advocacy, we were granted authorisation by the ministry of secondary education at the regional level to reach many more schools with brain health messages. We also obtained authorisation from school authorities in some of the schools to create brain clubs.

CONCLUSION

We will continue to implement these activities and scale them to other regions and national.

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