



# American College of Physicians, Bangladesh Chapter February, 2025

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## Message from the Governor

Dear Respected Members of the ACP Bangladesh Chapter,

I greet you warmly as we enter February 2025, hoping that this message finds you in good health and with renewed dedication to the vital work we do. As we embrace the challenges of winter, we also face a few new concerns that demand our collective attention and expertise.

This winter has seen an uptick in cases related to Human Metapneumovirus (HMPV) and the seasonal flu. Both of these respiratory infections have presented a unique challenge, particularly with the overlap of symptoms, making accurate diagnosis and timely intervention more critical than ever. I urge all physicians to remain vigilant in recognizing the early signs of these illnesses and to stay proactive in advising our patients on prevention strategies.

On an exciting note, I would like to remind everyone of the upcoming ACP Internal Medicine Meeting, set to take place in New Orleans from April 3rd to 5th, 2025. This is a fantastic opportunity to engage with fellow professionals from around the world, exchange ideas, and deepen our understanding of the evolving landscape of internal medicine. I highly encourage you to attend, as it promises to be a highly valuable experience both professionally and personally.

In conclusion, I want to express my deepest gratitude for your tireless dedication to the health and well-being of our communities. Together, we continue to rise to the occasion, tackling both familiar and new challenges with resilience and expertise. Let us remain committed to providing the best care possible, staying informed, and working as one in the face of adversity.

Thank you once again for your unwavering commitment to excellence in patient care.

With warm regards,  
Prof. Khan Abul Kalam Azad  
Governor, ACP Bangladesh Chapter



## ACP Internal Medicine Meeting 2025, New Orleans, LA

The highly anticipated ACP Internal Medicine Meeting 2025 will be held from April 3-5, 2025, in the vibrant city of New Orleans, USA. This premier event promises to be an unparalleled opportunity for internal medicine professionals from around the world to come together, enhance their knowledge, and share insights that will shape the future of patient care.

The ACP Internal Medicine Meeting is the largest gathering of internal medicine specialists globally, offering a platform to exchange ideas, discuss cutting-edge practices, and collaborate on innovative solutions to the challenges facing the field. Over the course of three days, attendees will have access to over 170 scientific and practice-related sessions, covering a wide array of topics within internal medicine and its subspecialties.

This year's meeting will feature expert faculty presenting on the latest advancements in clinical practice, research, and healthcare policy. Attendees will have the opportunity to participate in a variety of interactive formats tailored to different learning preferences. These formats include Clinical Pearls, Clinical Triads, Multiple Small Feedings of the Mind (MSFM), Slide Shows, Clinical Workshops, Meet the Professor sessions, Panels, and Updates, all designed to enhance practical knowledge and improve patient care techniques.

The ACP Bangladesh Chapter is excited to announce that several delegates from Bangladesh are expected to attend this year's meeting. For our members in Bangladesh, the ACP Internal Medicine Meeting represents a unique chance to connect with global leaders in internal medicine, learn from top-tier educators, and share best practices that can be applied to local healthcare settings. It is an excellent opportunity for professional development, networking, and fostering a deeper understanding of the global challenges and solutions in the field of internal medicine. We strongly encourage all members to consider attending and to take part in what promises to be a transformative experience.



ACP | Internal Medicine  
Meeting

## **Congratulations to Our New Governor-Elect Designee, Prof. Md Mujibur Rahman**

It is with great pleasure and excitement that we announce and extend our heartfelt congratulations to Prof. Md Mujibur Rahman, MBBS, MD, FCPS, FACP, who has been appointed as the Governor-elect Designee for the ACP Bangladesh Chapter. Dr. Rahman's appointment marks an exciting new chapter for our organization, and we are confident that under his leadership, our chapter will continue to grow and flourish. As an esteemed member of the medical community, Dr. Rahman has consistently demonstrated unwavering commitment to the advancement of internal medicine, as well as a deep dedication to the well-being of his patients and the professional development of his peers. His clinical expertise, coupled with his extensive academic background, positions him uniquely to lead our chapter to new heights.

As Governor-elect Designee, Dr. Rahman will play a critical role in steering the direction of our chapter, building partnerships, and ensuring that we remain at the forefront of healthcare excellence. His vision and leadership will be instrumental in continuing our mission to enhance the professional development of internists, support research, and foster collaboration both locally and globally. Please join us in congratulating Dr. Md Mujibur Rahman on this well-deserved honor, and we look forward to the exciting journey ahead under his stewardship.



## ACP Bangladesh Chapter Observes ‘Internal Medicine Day 2024’

On 28th October 2024, the ACP Bangladesh Chapter proudly celebrated Internal Medicine Day 2024 with a special focus on the theme “We Are for Comprehensive Patient Care and Education.” This observance was an opportunity to reflect on the pivotal role that internal medicine plays in ensuring holistic healthcare, and to highlight the ongoing commitment of ACP members to both patient care and continuous professional education.

The event featured a discussion program among internists, where leading medical professionals gathered to share insights, exchange knowledge, and engage in a meaningful dialogue about the current challenges and opportunities in the practice of internal medicine. The program fostered an open environment for sharing clinical experiences and discussing best practices in patient care, focusing on the critical importance of a comprehensive approach that goes beyond treating a specific disease or condition.

The ACP Bangladesh Chapter has long been a leader in promoting the principles of evidence-based practice, continuous learning, and patient-centered care. As we celebrated Internal Medicine Day, the chapter reaffirmed its commitment to improving the quality of healthcare in Bangladesh through the professional development of its members. The chapter provides a platform for internists to connect, share knowledge, and collaborate in tackling the complex healthcare issues facing our country.

As we conclude another successful Internal Medicine Day, we look forward to further strengthening our network and continuing to advance the practice of internal medicine in Bangladesh. We thank all the internists who participated in the discussions and contributed to the success of the event. Together, we will continue to drive progress in internal medicine and work towards a healthier future for our communities.



## ACP Bangladesh Chapter Observes ‘World Diabetes Day 2024’

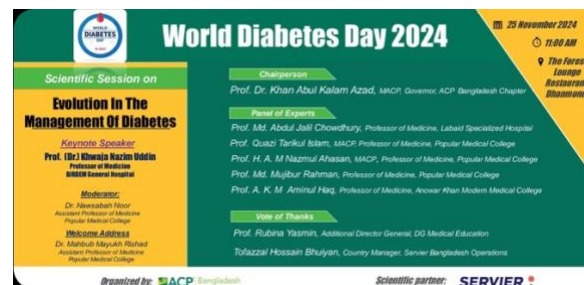
On 25th November 2024, the ACP Bangladesh Chapter marked World Diabetes Day 2024 with an important educational seminar focused on the theme "Evaluation in the Management of Diabetes." The event provided an invaluable opportunity for healthcare professionals to come together and gain insights into the evolving strategies for diagnosing and managing diabetes—one of the most pressing health challenges in Bangladesh and around the world.

The seminar featured an outstanding lecture by Prof. Khwaja Nazim Uddin, a renowned expert in endocrinology and diabetes care. Prof. Uddin delivered an in-depth presentation on the latest advancements in diabetes management, highlighting the importance of personalized treatment plans and multidisciplinary approaches to care. He discussed how innovative diagnostic tools, such as continuous glucose monitoring (CGM) and HbA1c testing, are transforming how we evaluate and manage diabetes, allowing for more precise and timely interventions.

The panel of experts, which included Prof. Md. Mujibur Rahman, Prof. Quazi Tarikul Islam, Prof. MA Jalil Chowdhury, Prof. AKM Aminul Haq and Prof. HAM Nazmul Ahasan, added tremendous value to the event with their collective expertise and perspective. The presence of these distinguished figures, who have been instrumental in shaping the direction of ACP Bangladesh Chapter, underscored the chapter's commitment to advancing the field of internal medicine in Bangladesh.

The chairperson Prof. Khan Abul Kalam Azad, the Governor, spoke about the increasing burden of diabetes in Bangladesh and emphasized the need for education and training to ensure that healthcare professionals stay up-to-date with the latest developments in the field. Prof. Islam, the Founding Governor, provided reflections on how much progress has been made since the chapter's inception and how the continuous engagement of professionals in events like this has elevated the standard of internal medicine practice in Bangladesh. Prof. Ahasan, the Former Governor, offered a broader perspective on the global challenges of diabetes management, highlighting the importance of collaboration and research in addressing these challenges.

The seminar was attended by a large number of internists and general practitioners, all eager to update their knowledge and share best practices in managing diabetes. Participants appreciated the valuable insights provided by the speakers and panelists, and many took part in the lively Q&A session, asking questions about integrating new tools and strategies into everyday practice.



The poster for the World Diabetes Day 2024 event is organized by ACP Bangladesh. It features a green and yellow color scheme. The main title is "World Diabetes Day 2024" in white text on a green background. Below the title, it specifies the date and time: "25 November 2024" and "11:00 AM". The event is held at "The Forest Lounge Restaurant, Dhaka". The poster lists the following details:

- Chairperson:** Prof. Dr. Khan Abul Kalam Azad, MAOP Governor, ACP Bangladesh Chapter
- Panel of Experts:**
  - Prof. Md. Abdul Jalil Chowdhury, Professor of Medicine, Labaid Specialized Hospital
  - Prof. Quazi Tarikul Islam, MAOP Professor of Medicine, Popular Medical College
  - Prof. H. A. M Nazmul Ahasan, MAOP, Professor of Medicine, Popular Medical College
  - Prof. Md. Mujibur Rahman, Professor of Medicine, Popular Medical College
  - Prof. A. K. M. Aminul Haq, Professor of Medicine, Anwar Khan Modern Medical College
- Keynote Speaker:** Prof. Dr. Khwaja Nazim Uddin, Professor of Medicine, IGC General Hospital
- Moderator:** Dr. Nazimul Haque, Assistant Professor of Medicine, Popular Medical College
- Website Address:** Dr. Manjibul Maysah Rashid, Assistant Professor of Medicine, Popular Medical College
- Vote of Thanks:** Prof. Rubina Yasmin, Additional Director General, DG Medical Education; Tofazzal Hossain Bhuiyan, Country Manager, Servier Bangladesh Operations

The poster also includes logos for ACP Bangladesh and Servier, and mentions "Scientific partner: SERVIER".



## Workshop on "Arterial Blood Gas Analysis" for Residents

The ACP Bangladesh Chapter, in collaboration with the Department of Internal Medicine, Bangabandhu Sheikh Mujib Medical University (BSMMU), successfully conducted a workshop on Arterial Blood Gas (ABG) Analysis on December 2, 2024. This workshop was specifically designed to enhance the competency of residents and early-career physicians in interpreting ABG reports and utilizing them for critical decision-making in patient care.

The session was chaired by Prof. Dr. Khan Abul Kalam Azad, Governor of ACP Bangladesh Chapter, with Prof. Dr. Md. Abul Kalam Azad, Pro-Vice Chancellor (Administration) of BSMMU and Chairman of the Department of Internal Medicine, as the Chief Guest. The event was further enriched by the presence of Prof. Dr. Md. Mujibur Rahman Hawlader, Pro-Vice Chancellor (Research and Development), BSMMU; Prof. Quazi Tarikul Islam, Professor of Medicine, Founding Governor of ACP Bangladesh Chapter; Prof. Md. Mujibur Rahman, Governor Elect, ACP Bangladesh Chapter, as the Special Guests.

The workshop featured an expert lecture by Prof. Dr. Md. Mozammel Haque, Professor and Chairman of the Department of Biochemistry, BSMMU, who provided valuable insights into the principles, clinical application, and real-world interpretation of ABG reports. The workshop covered:

- Basic principles of ABG analysis
- Identifying acid-base imbalances and their clinical implications
- ABG-based diagnosis of respiratory and metabolic disorders
- Hands-on case discussions for real-world application

Participants engaged in interactive discussions, case-based exercises, and problem-solving sessions to enhance their practical skills in interpreting ABG results accurately in emergency and ICU settings.

ABG analysis is a fundamental skill for internal medicine residents to assess oxygenation, ventilation, and metabolic disturbances in critically ill patients. This workshop provided structured, high-yield training, ensuring that young physicians gain confidence in using ABG reports for timely interventions. With an overwhelming response from the participants, ACP Bangladesh Chapter remains committed to organizing more hands-on workshops and skill-based training programs to empower residents and young physicians in their clinical practice.







# Hands-on Training on "Point of Care Ultrasound" for Early-Career Physicians

The ACP Bangladesh Chapter, in collaboration with the Department of Internal Medicine, Bangabandhu Sheikh Mujib Medical University (BSMMU), successfully organized a hands-on training session on Point of Care Ultrasound (POCUS) on December 9, 2024. This program was specifically designed to enhance the ultrasound skills of early-career physicians, enabling them to integrate bedside ultrasonography into routine clinical practice for rapid and accurate decision-making.

The training was chaired by Prof. Dr. Khan Abul Kalam Azad, MACP, Governor of ACP Bangladesh Chapter, and inaugurated by Chief Guest Prof. Dr. Md. Abul Kalam Azad, Pro-Vice Chancellor (Administration) of BSMMU and Chairman of the Department of Internal Medicine. The event was further graced by distinguished special guests, including: Prof. Dr. Quazi Tarik Islam, MACP – Founding Governor, ACP Bangladesh Chapter, Prof. Dr. H A M Nazmul Ahasan, MACP – Immediate Past Governor, ACP Bangladesh Chapter, Prof. Dr. Md. Mujibur Rahman – Governor-Elect Designee, ACP Bangladesh Chapter, Prof. Dr. Shohael Mahmud Arafat – Professor, Department of Internal Medicine, BSMMU, Prof. Dr. Md. Rafiqul Alam, Prof. Dr. Quazi Mamtaz Uddin Ahmed, Prof. Dr. Md. Ferdous Ur Rahaman – Faculty, Department of Internal Medicine, BSMMU, Prof. Dr. AKM Aminul Hoque, MACP – Professor, Anwer Khan Modern Medical College

The technical sessions were conducted by renowned faculty members specializing in POCUS, including: Dr. Khaled Mahbub Murshed, Assistant Professor, BSMMU and Dr. Kazi Ali Aftab, Assistant Professor, BSMMU. Dr. Mohammad Syedul Islam, Assistant Professor, BSMMU, moderated the session, ensuring an interactive and engaging learning environment.

The training emphasized real-time ultrasound application in internal medicine, covering key areas such as lung ultrasound, focused cardiac assessment, abdominal scanning, and procedural guidance. Participants had the opportunity to practice directly on ultrasound machines, refining their hands-on skills under expert supervision.

This initiative aligns with ACP Bangladesh Chapter's commitment to enhancing the clinical competencies of young physicians by promoting the use of POCUS for bedside decision-making. The session highlighted how ultrasound can reduce diagnostic delays, minimize invasive procedures, and improve overall patient outcomes. With an overwhelming response from participants, ACP Bangladesh Chapter looks forward to expanding POCUS training programs, ensuring more physicians are equipped with this invaluable skill in clinical practice.







## ACP Bangladesh Chapter CME: 'Clinical Reasoning in Medical Practice'

ACP Bangladesh Chapter successfully organized a Continuing Medical Education (CME) session on "Clinical Reasoning in Medical Practice" on December 30, 2024, at Popular Medical College & Hospital, Dhaka. This interactive session aimed to refine the clinical decision-making skills of physicians by enhancing their ability to analyze complex cases, integrate medical knowledge, and apply logical reasoning to patient management.

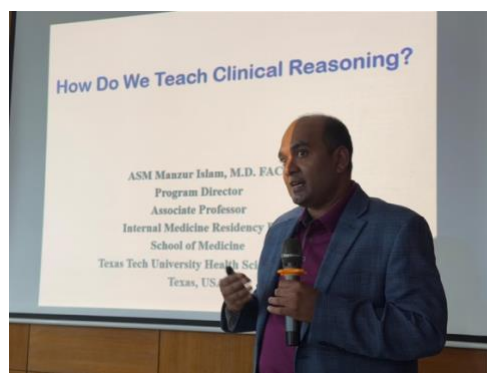
The keynote speaker for this session was Dr. ASM Manzur Islam, MD, FACP, from Texas Tech University Health Sciences Center, School of Medicine, USA. With extensive expertise in internal medicine and medical education, he provided valuable insights into cognitive biases, diagnostic accuracy, and evidence-based approaches to clinical reasoning.

The session was chaired by Prof. Dr. Khan Abul Kalam Azad, MACP, Governor of ACP Bangladesh Chapter. Prof. Dr. Md. Mujibur Rahman, FACP, Head of Medicine, Popular Medical College & Governor Elect Designee of ACP Bangladesh Chapter, served as the Co-Chairperson. The event was graced by Prof. Dr. Quazi Tarikul Islam, MACP, Founding Governor of ACP Bangladesh Chapter, and Prof. Dr. HAM Nazmul Ahasan, MACP, Former Governor of ACP Bangladesh Chapter, as special guests. Their experience and mentorship added depth to the discussions, fostering a stimulating academic atmosphere.

Key topics covered included:

- ✓ Cognitive errors in diagnosis and ways to mitigate them
- ✓ Problem-based learning in clinical decision-making
- ✓ Effective history-taking and diagnostic prioritization
- ✓ Application of clinical reasoning in complex and rare cases

Participants actively engaged in case-based discussions and real-world clinical scenarios, which helped them refine their ability to make timely and accurate diagnoses in challenging situations. This CME emphasized the importance of structured clinical reasoning in improving patient outcomes, ensuring that physicians can navigate diagnostic uncertainty with confidence.





## ACP Bangladesh Chapter CME: 'Approach to Electrolyte Disorders'

The ACP Bangladesh Chapter recently organized an engaging Continuing Medical Education (CME) session titled "Approach to Electrolyte Disorders." The event showcased the commitment of the chapter to fostering excellence in clinical practice and medical education. Held under the leadership of distinguished experts, the session was both insightful and highly interactive.

The keynote address was delivered by Dr. Shafiqul Barr Chowdhury, MRCP (UK), FCPS, FRACP, a Senior Consultant Nephrologist at Wollongong Hospital and Senior Lecturer at Wollongong University. Dr. Chowdhury's vast clinical expertise and academic acumen enriched the session as he elucidated a systematic approach to diagnosing and managing electrolyte imbalances. His presentation was comprehensive, covering the pathophysiology, clinical implications, and evidence-based management strategies for common and complex electrolyte disorders.

The CME was chaired by Professor Khan Abul Kalam Azad, MACP, Governor of the ACP Bangladesh Chapter, whose guidance and dedication have been pivotal in advancing the chapter's educational initiatives. Co-chairing the event was Professor Md. Mujibur Rahman, FACP, Governor-Elect Designate of the ACP Bangladesh Chapter, who emphasized the importance of such educational activities in enhancing clinical acumen among physicians. The session was further enriched by the presence of two eminent figures: Professor Quazi Tarikul Islam, MACP, Founding Governor of the ACP Bangladesh Chapter, whose pioneering vision laid the foundation for the chapter's growth. Professor HAM Nazmul Ahasan, MACP, Former Governor of the ACP Bangladesh Chapter, whose leadership and contributions have significantly shaped the chapter's achievements.

Dr. Chowdhury's lecture highlighted:

- Electrolyte Homeostasis: Understanding the physiological mechanisms maintaining balance.
- Clinical Scenarios: Real-world cases demonstrating diagnostic challenges and management strategies.
- Practical Insights: Simplified algorithms and tips for approaching disorders like hyponatremia, hyperkalemia, and metabolic acidosis.
- Interactive Q&A: Attendees actively participated, raising pertinent clinical questions and sharing their experiences.

The CME drew an audience of physicians, residents, and medical students, all of whom expressed deep appreciation for the relevance and clarity of the session. Many attendees noted that the practical insights gained would significantly enhance their clinical decision-making and patient care practices. The ACP Bangladesh Chapter extends heartfelt gratitude to Dr. Shafiqul Chowdhury for his invaluable contribution and to the distinguished chairpersons and special guests for their guidance and support.





## IMIG Group of Dhaka Medical College: Serving Flood-Affected Communities in Sherpur

On October 25, 2024, the Internal Medicine Interest Group (IMIG) from Dhaka Medical College demonstrated an inspiring commitment to community service by extending their support to the flood-affected victims in Sherpur. This initiative highlighted the group's dedication to addressing public health crises and their ability to act swiftly in times of need.

The IMIG group, comprising enthusiastic and compassionate medical students, organized an emergency medical camp to address the immediate healthcare needs of the flood victims. They provided essential medical services, including consultations, distribution of medications, and basic health education to prevent waterborne diseases. The team focused on treating common ailments such as diarrhea, respiratory infections, and skin conditions, which are prevalent during flood emergencies. In addition to medical aid, the students also distributed dry food packages to ensure that the affected families had access to essential sustenance during this challenging time. These packages included staples such as rice, lentils, and other non-perishable items to alleviate the victims' immediate hunger and nutritional needs.

The efforts of the IMIG group brought much-needed relief to the flood-stricken community. The local residents expressed their gratitude for the timely support, which helped mitigate some of the hardships caused by the disaster. The group's initiative also served as a reminder of the importance of compassion and proactive engagement in addressing public health emergencies.

The ACP Bangladesh Chapter commends the IMIG group of Dhaka Medical College for their exceptional humanitarian efforts. Their dedication not only reflects their commitment to medicine but also serves as an inspiration for future healthcare professionals to engage actively in community service.



## Meeting Minutes of Advisory Council

ACP Meeting Minutes

Date: November 6th, 2024

Time: 12pm

A meeting of the advisory council of ACP Bangladesh Chapter was held on 06.11.24 at 12-00 pm. Total 15 members were present in the meeting. At first introductory speech was given by the Governor, ACP Bangladesh Chapter. In his speech, Mr. Governor addressed different issues and initiatives for further upgrading of ACP Bangladesh Chapter. Active discussion was done by the members of the advisory council on different agendas and following decisions were taken

### **Agenda 1: IMIG program.**

**Decision:** The members of the advisory council discussed actively about IMIG program and gave their valuable opinions for further improvement of this program. In this regard, members were agreed that ACP Bangladesh Chapter should take initiatives to formulate IMIG group in different medical colleges preferably from the periphery and also the private medical colleges. Thus more undergraduate students will be involved in this program. The next IMIG program will be arranged in Popular Medical College, Dhaka in January, 2025. A committee was formed on this issue comprising two members- Professor. Md. Mujibur Rahman and Dr. Nowshaba Noor.

### **Agenda 2: Resident's program.**

**Decision:** Decision was taken that next resident's program will be arranged in BSMMU in December, 2024. It will be a two days program. There will be 'Hands on USG Training' and class on 'ABG with clinical interpretation'. Professor Abul Kalam Azad will take the responsibility to arrange the program. Another program will be held in AMZ Hospital on 'Hands on ECHO and Endoscopy Training after April, 2025. Professor Ahmedul Kabir was given the responsibility to arrange the program. A total of 100 participants will be included in these programs.

### **Agenda 3: Program on awareness and volunteerism**

#### **Decision:**

1. It was decided that two programs on voluntary service will be held in December, 2024. Decision was taken that winter clothing will be distributed in December, 2024 at Dhaka and Bogra. At Dhaka, Professor A K M Aminul Hoque and at Bogra, Professor Md. Zakir Hossain will take the responsibilities to arrange the program.

At the same time a scientific program will be arranged along with the voluntary service program at Bogra. A committee was formed regarding this program comprising Professor Asadul Kabir and Professor Rubina Yasmin.

2. It was also decided that a Medical camp will be arranged on 25.04.25 at Gazipur.

### **Agenda 4: Annual dinner:**

**Decision:** Decision was taken that the tentative date of annual dinner of ACP Bangladesh Chapter will be decided at suitable time Sheikh Fazilatunnesa Mujib Convention Hall, BSMMU.

At the same time award committee was requested to make a list of awardees for their contribution in the field of Medicine and nominee for Laureate award, so that these awards can be given on annual dinner.

**Agenda 5: Miscellaneous:**

**Decision:** Decision was taken that Dr. Nowshaba Noor, Assistant Professor, Popular Medical College will be the new secretary to Governor, ACP Bangladesh Chapter. The members congratulated Professor Abul Kalam Azad for being promoted as Pro-Vice Chancellor Admin, BSMMU and Professor Rubina Yasmin for being promoted as Assistant Director General Medical Education, Bangladesh.

Finally, Governor ACP Bangladesh Chapter gave heartfelt thanks to all the participants of the meeting and requested to join the next meeting.



## List of new members in last six months

mail_name	last_name
A M Wadud Al Hasan, MBBS	Al Hasan
A S M Tanim Anwar, MBBS MD	Anwar
A. K. M. FAZLUL KADER, MBBS MD	KADER
A.H.M. Khairul Imam Suman, MBBS	Suman
Abdur Rob	Rob
Abdur Rouf Munna, MBBS	Munna
ABM Safiullah, MBBS	Safiullah
ABU HAYAT MOHAMMOD WALIUR RAHMAN	RAHMAN
ABU JAFAR MD SHAHIDUL HOQ, MBBS MD PhD	SHAHIDUL HOQ
Aleya Ferdush Monni, MD	Monni
Alok Kumar Sarker, MBBS MD	Sarker
Amit K Tarafder, MBBS	Tarafder
Anowar Ahmed, MBBS	Ahmed
Ashish Kumer Roy, MBBS MD	Roy
Asim Kumar Biswas, MBBS	Biswas
ATIKUL AZIZ, MBBS	AZIZ
Bablu Kumar Pal, MBBS MD	Pal
Bappaditya Gain, MBBS	Gain
Bikash Chandra Mandal, MBBS	Mandal
Biplob Chandra Sarker, MBBS MD	Sarker
CDR Kamal Hossein Sr	Hossein
Chanchal Ghosh, MBBS MD	Ghosh
Chinmoy Kumar Saha, MBBS	Saha
Choudhury Dilabiz Mahmood, MBBS	Mahmood
Debraj Malakar, MD	Malakar
Dr MD Oliur Rahman Adnan, MBBS	Rahman Adnan
Dr Musanna Sobhan, MBBS MD	Sobhan
Dr Nowroj Ahmed, MBBS MD	Ahmed
DR. Farzana Haque, MBBS	Haque
DR. MD AYNUL ISLAM, MBBS MD	ISLAM
DR. MD. ALTAF HOSSAIN, MBBS	HOSSAIN
Dr. Md. Mahmudul Hoque Bhuiyan, MBBS	Bhuiyan
DR. MD. MOSIUR RAHMAN, MBBS MD	RAHMAN
DR. MD. SAZZADUR RAHMAN, MBBS	RAHMAN
Dr. Md. Tanvir Hasan, MBBS	Hasan
Dr. Rajdeep Biswas, MBBS	Biswas
Dr. S. M Mahmud Hasan, MBBS MD	Hasan
Dr. Shahidul Islam, MBBS MD	Islam
Dr. Suhel Rana Khan	Khan
Dr. Syed Atiqullah, MD	Atiqullah
Dr. Tamim Muntasir, MBBS	Muntasir
Dr. Tauhidur Rahman, MBBS	Rahman
Fakhrul Chowdhury, MBBS MD	Chowdhury
Gazi Mohammad Imranul Haque, MBBS MD	Imranul Haque
Golam Mahabub Sikder, MBBS MD	Sikder

mail_name	last_name
GOLAM SODRUDDIN, MBBS MD	SODRUDDIN
Hasan M Reza, MBBS	Reza
Hasanul Islam, MBBS MD	Islam
Imtiaz Hasan, MBBS MD	Hasan
Imtiaz Uddin Ahmed, MBBS	Ahmed
Jamil Taufiq Imam, MBBS MD	Imam
Jannatul Mawa Sweety, MBBS	Sweety
Jyoti Vaskor Saha, MBBS MD	Saha
Kazi Al Baruny, MBBS	Al Baruny
KAZI SHAMIM AL MAMUN, MBBS	MAMUN
Khadija Siddika, MBBS	Siddika
Kishaloy Sur, MBBS	Sur
KRISHNA PADA BANIK, MBBS	BANIK
LT COL Mohammad Enamul Hoque, MBBS	Hoque
M A Awal Chowdhury, MBBS	Chowdhury
Mahady Hasan, MBBS	Hasan
Mahmudul Hasan, MBBS	Hasan
Md Abdullah Al Mamun, MBBS	Al Mamun
Md Abdullah Al Mamun, MBBS	Mamun
Md Abdus Sabur Khan, MBBS MD	Khan
Md Abul Kalam Azad, MBBS	Azad
Md Ahasanul Haque Razib, MD	Razib
Md Akhter Hossain, MBBS	Hossain
Md Arman Hossain, MBBS	Hossain
Md Ashekur Rahman, MBBS	Rahman
Md Ashrafal Islam Irfan, MBBS	Irfan
Md Atiquel Islam Chowdhury, MBBS	Chowdhury
Md Bedar Uddin, MBBS MD	Uddin
Md Dilder Hossain Badal, MBBS MD	Badal
MD FAHIM UZ ZAMAN, MBBS MD	UZ ZAMAN
Md Fazla Elahi, MBBS MD	Elahi
Md Golam Mortuza, MBBS	Mortuza
Md Hasan Iqbal Majumder, MBBS MD	Majumder
Md Ibrahim, MBBS	Ibrahim
Md Imrul Kayes, MBBS MD	Kayes
Md Jouel Ahamed, MBBS MD	Ahamed
Md Jubair Wahid, MBBS	Wahid
Md Khandaker Hafijur Rahman, MBBS	Rahman
MD Maksudullah, MD	Maksudullah
Md Maruf Raihan Khan, MBBS	Khan
Md Masud Rana, MBBS	Rana
Md mesbah Islam, MD	Islam
Md Minhaj Arefin, MBBS MD	Arefin
Md Moniruzzaman, MBBS	Moniruzzaman
MD MOSHIUR RAHMAN, MBBS	RAHMAN
Md Mustafezur Rahman, MBBS	Rahman
Md Najmus Saadat, MBBS	Saadat

mail_name	last_name
Md Najmus Sakib, MBBS MD	Sakib
Md Nazmul Islam, MBBS	Islam
Md Pervez Amin, MBBS MD	Amin
Md Saiful Islam, MBBS	Islam
Md Shahin Alam, MBBS	Alam
Md Shakib Uzzaman Arefin, MBBS MD	Arefin
Md Shameem Haidar, MBBS	Haidar
Md Shamsul Islam, MBBS	Islam
Md Shayedul Ashik, MBBS	Ashik
Md. Abul Kashem, MBBS MD	Kashem
Md. Ahsan Habib, MBBS MD	Habib
Md. Danial Haque, MBBS	Haque
Md. Enamol Hoque, MBBS MD	Hoque
Md. Harun Or Rashid, MBBS	Rashid
Md. Kawsar Uddin, MBBS	Uddin
Md. Khairul Islam, MBBS	Islam
Md. Main Uddin, MBBS	Uddin
Md. Mamun-or-Rashid, MBBS MD	Mamun-or-Rashid
Md. Mohai Minul Azad, MBBS	Azad
Md. Mosiur Rahman, MBBS	Rahman
Md. Muhibbur Rahman, MD	Rahman
Md. Ruhid Hossain, MBBS	Hossain
Md. Sayem Sorwer, MBBS	Sorwer
Md. Shahin Howlader Tahsun, MBBS	Tahsun
Md. Solaiman, MBBS MD	Solaiman
MD. TOWFIQUL ISLAM, MBBS	ISLAM
Md.Kamal Hossein, MBBS	Hossein
Mir Mahbubur Rahman, MD	Mahbubur Rahman
Mohammad Abdullah, MBBS MD	Abdullah
Mohammad Abdus Sattar Bhuiyan, MBBS MD	Bhuiyan
Mohammad Ali Asraf Sohag, MBBS MD	Sohag
Mohammad Ali Rumees, MD	Rumees
Mohammad Azizur Rahman, MBBS	Rahman
Mohammad Golam Azam, MBBS	Azam
Mohammad Hyder Ali, MBBS	Ali
Mohammad Minhaz Uddin, MBBS	Uddin
Mohammad Sabidur Rahman, MD	Rahman
Mohammad Salim, MBBS MD	Salim
Mohammad Sohal Rana	Rana
Mohammad Syedul Islam, MBBS MD	Islam
Mohammad Tajul Islam, MBBS	Tajul Islam
Mohammed Arman, MBBS	Arman
Mohidur Rahman Khan, MBBS	Khan
Mostak Uddin Ahmed, MD	Ahmed
Mugni Sunny, MBBS	Sunny
Muhammad Rezeul Huq, MBBS MD	Huq
Muhammad Saiful Islam, MBBS MD	Islam

mail_name	last_name
NASIR AHMED, MBBS MD	AHMED
NAZMUL HASAN, MBBS MD	HASAN
Nazmul Hoque Sarker, MBBS	Sarker
Nazrul Islam, MBBS	Islam
Nizam Uddin Ahmed Chowdhury, MBBS MD	Uddin Ahmed Chowdhury
Nur Mohammad Hossain, MBBS	Hossain
PUNOM KUMAR BHATTACHARYYA, MBBS	BHATTACHARYYA
Q M Mahabub Ullah, MD	Ullah
Rafia Binte Rouf, MBBS	Rouf
Rahul Saha, MBBS	Saha
Ramim Islam Ibne Noor, MBBS MD	Ibne Noor
Rana Tareq Hasan	Tareq Hasan
S M Mamunoor Rahman Rubel, MBBS	Rubel
S M SAFAYET HOSSEN, MBBS	HOSSEN
S.M. Nowsher Ali Bhuiyan, MBBS	Ali Bhuiyan
Samira Khatun, MBBS MD	Khatun
Samsud Doha Ulfat, MBBS	Ulfat
Sarif Mahammad Salauddin, MBBS	Salauddin
Shahin Ibn Rahman, MBBS MD	Rahman
Shahriar Kabir, MBBS	Kabir
Sharmin Sultana, MBBS MD	Sultana
Shohag Chakrabarty, MBBS	Chakrabarty
Shourav Das, MBBS	Das
SM FAIZ AKBAR, MBBS	AKBAR
Subrata Kumar, MBBS	Kumar
Sukanta Biswas, MBBS	Biswas
Supriya Sarker, MBBS	Sarker
Surabhi Debnath, MBBS MD	Debnath
Suriya Shahaly, MBBS MD	Shahaly
Syed Mahmood Shahidul Islam, DNB MB MBBS	Shahidul Islam
Syed Nazmul Islam, MBBS	Islam
Syeda Masuma Kawsar, MBBS MD	Kawsar
Tanjima Tajreen, MBBS	Tajreen
Tonmoy Biswas, MBBS MRCP	Biswas
Toufiqe-E Ealahi, MBBS MD	Ealahi
Towhidul Islam	Islam
Uzzal Kanti Das, MBBS MD	Das
Washim Ahmed, MBBS	Ahmed
Yemin Ahmed, MD	Ahmed

## List of new fellows in last six months

mail_name	last_name
A.S.M. Rizwan, MBBS FACP	Rizwan
Abul Faisal Md Nuruddin Chowdhury, MBBS FACP	Chowdhury
Gobinda Chandra Roy, MD FACP	Roy
Golam-ur- Rahaman Sohail, FCPS MBBS FACP	Rahaman Sohail
Istiaq Ahmad, MBBS FACP	Ahmad
Jinat Farjana, MD FACP	Farjana
Kabirul Hasan Bin Rakib, MBBS FACP	Rakib
Mahbuba Shabnam, MBBS FACP	Shabnam
Mahmood Hasan Khan, MBBS MD FACP	Khan
Marjoa Humaira Mekhola, MBBS MD FACP	Mekhola
Md Amir Hossain, MBBS FACP	Hossain
Md Annaz Mus Sakib, MBBS FACP	Sakib
Md Mohi Uddin, MBBS FACP	Uddin
Md Shakhawat Hossain, MBBS MD FACP	Hossain
Md. Mohiuddin Khan, MBBS FACP	Khan
Mohammad Golam Rob Mahmud, MBBS FACP	Mahmud
Mohammad Kamruzzaman Mazumder, MD FACP	Mazumder
Mohammed Masudul Hassan Khan, MBBS FACP	Khan
Mst Wahida Pervin, MBBS FACP	Pervin
Muhammad Faizur Rahman, MBBS FACP	Rahman
Muhammad Hezbullah, MBBS FACP	Hezbullah
Muhammad Kamruzzaman Khokan, MD FACP	Khokan
Muhammad R Islam, MBBS MD FACP	Islam
N.S.M. Momtazul Islam, MBBS MD FACP	Islam
Nira Ferdous, MBBS FACP	Ferdous
Palash Kumar Biswas, MBBS FCPS FACP	Biswas
Prabir Mohan Basak, MBBS FACP	Basak
Prashanta Kumar Shil, MBBS FACP	Shil
Rashedul Hassan, MBBS FACP	Hassan
Sabbir A Dhali, MD FACP	Dhali
Sayeef Hossain Khan Mark, MBBS FACP	Mark
Shah Md Roushan Kabir Choudhury, MBBS FACP	Choudhury
Subrata Podder, FACP MBBS MD	Podder
Taslima Zaman, MBBS MD FACP	Zaman

# Japanese Encephalitis in Bangladesh

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Japanese encephalitis virus (JEV) is a mosquito-borne flavivirus closely related to dengue, yellow fever, West Nile, Zika, and St. Louis encephalitis viruses. Mosquitoes of the *Culex* Vishnu subgroup, particularly *Culex tritaeniorhynchus*, are the main vectors of JEV. This zoophilic mosquito species is sustained in an enzootic cycle with pigs and wading birds as amplifying hosts. Pigs are a key host as they develop high levels of viremia and have subclinical infection. Large numbers of pigs are frequently kept near human dwellings in many Asian countries. *Culex tritaeniorhynchus* mosquitoes, one of the main vectors of JEV, breed in wet paddy fields. Wading birds, another known vertebrate host of JEV, are also frequently found in paddy fields. Some authors propose that ducks and chickens act as amplifying hosts in Bangladesh. If infected, ducks and chickens can produce sufficient viremia, and their number and density in Bangladesh are pretty high. Non-avian vertebrates such as humans and horses are considered unintentional dead-end hosts as they do not generate enough viremia to infect new mosquitoes.<sup>1</sup>

JE is endemic to rural Asia, the Western Pacific, and northern Australia, with three billion people at risk. Globally, an estimated 68,000 clinical cases occur annually, and over 13,000 deaths.<sup>1,2</sup> One-third of JE infections are fatal, and half of the survivors develop permanent neurological sequelae. Because of the frequent neurological sequelae, JEV causes the loss of more disability-adjusted life years than any other arthropod-borne virus.<sup>3</sup>

AM Khan et al. first described a focus on Japanese encephalitis in the Modhupur Forest area, Bangladesh, in 1981.<sup>4</sup>

JEV is a single-stranded, positive-sense RNA virus. The virion is spherical, around 50 nm in diameter, and contains a central nucleocapsid core of viral RNA and core protein. This core is surrounded by a lipid bilayer envelope in the mature virion where the viral membrane and envelope proteins are embedded.<sup>5</sup>

Two epidemiological patterns of JE are recognized: epidemic and endemic. Bangladesh, Northern India, Pakistan, Nepal, Bhutan, China, and some other countries are in the epidemic zone.<sup>6</sup> In most of the endemic areas, JE typically affects children <15 years of age; by early adulthood, the majority of the population has protective immunity following natural exposure to JEV as a result of ongoing environmental transmission. But Bangladesh has a different age distribution for JE. Hospital-based surveillance in Bangladesh showed that both children and adults are affected by JE, and the median age of JE cases is 30 years. About two-thirds of cases in Rajshahi, Rangpur, and Khulna regions were in persons aged >15 years; only in the Chittagong region, the majority (64%) of cases were aged ≤15 years. This was similar to another hospital-based surveillance in Bangladesh between 2003–2005, in which 55% of cases were also >15 years of age.<sup>7</sup>



KK Paul et al. reported results of hospital-based surveillance of acute meningoencephalitis syndrome (AMES) conducted in four government medical college hospitals, namely Rajshahi, Rangpur, Khulna, and Chittagong medical colleges. Between 2007 and 2016, 6543 AMES patients were detected at four tertiary hospitals. Of the 6525 patients screened, 548 (8%) were categorized as JE patients. These 548 individuals lived in 36 (56%) of Bangladesh's 64 districts. The majority of JE cases among AMES patients (12% and 7%) occurred in Rangpur and Rajshahi regions, respectively. This is likely associated with a higher concentration of pigs, a primary vertebrate host in the JEV transmission cycle, in the northwestern areas of Bangladesh. Most JE cases in Bangladesh (80%) occurred during July–November, corresponding to the monsoon and post-monsoon months. This is likely related to the abundance of *Culex tritaeniorhynchus* in these months due to prolific breeding in the paddy fields and other water bodies.<sup>7</sup> Unpublished data from ongoing JE surveillance in the government hospitals of Bangladesh showed that, between 2017 to 2024, a total 501 confirmed JE cases were detected in the surveillance hospitals of Bangladesh. Highest number of cases (141) occurred in Rangpur region, followed by 130 cases in Rajshahi region. JE cases were much lower in Barisal, Mymensing and Sylhet region (10, 17 and 19 cases, respectively).

Most JEV infections are subclinical, with a symptomatic-to-asymptomatic ratio of 1:25–1000. About 1% of infections induce clinical illness with a 20%–30 % mortality risk, and another 30 %–50 % of recovered persons may have long-term neuropsychiatric consequences.<sup>8</sup> Symptomatic JEV infection can induce a spectrum of clinical manifestations ranging from undifferentiated febrile illness and aseptic meningitis to acute encephalitis. After an incubation period of 5 to 15 days, initial symptoms are usually nonspecific and may include fever and rigors followed by headache, and vomiting. The acute encephalitic phase is characterized by changes in mental status, focal neurologic abnormalities, and movement disorders. A very distinctive clinical presentation of JE is Parkinsonian syndrome resulting from extrapyramidal involvement.<sup>9</sup>

Laboratory confirmation of JEV infection requires one of the following: 1) the presence of JEV-specific IgM antibody in serum or cerebrospinal fluid (CSF) samples in the absence of IgM to other flaviviruses; 2) the detection of a more than 4-fold increase in JEV-neutralizing antibody between acute and convalescent stages.<sup>10</sup> MRI of the brain might be an important tool for diagnosing Japanese encephalitis. It may help to differentiate JE from other types of encephalitis in the initial days while microbiological reports are pending. In an Indian cohort of 54 JE patients, the majority of JE patients exhibited aberrant signal changes in bilateral thalami and substantia nigra.<sup>11</sup>

Treatment is primarily supportive, as no specific antiviral treatment for JE exists. Prevention with the JE vaccine is probably the best approach. The most commonly used Japanese encephalitis vaccines now are based on the attenuated strain SA14-14-2, which was generated from the JEV SA14 strain (which has relatively low pathogenicity) and grown from larvae of *Culex pipiens* from Xi'an in 1954. The live attenuated vaccine SA14-14-2 produces neutralizing antibodies against wild genotype III strains in humans.<sup>12</sup>

The World Health Organization (WHO) advocates human immunization as the most effective JE control method. Several WHO-prequalified vaccinations are available to prevent JE, but no vaccination program has been established in Bangladesh. JEV antibodies were found in 19.0% of

the Bangladeshi population. On average, 0.7% of the susceptible population becomes infected each year, with proximity to pigs being the primary human infection risk. It is believed that 1 in 1000 infections causes severe disease, 1 in 10,000 causes death, and hospital surveillance misses 76% of severe cases.<sup>13</sup>

Japanese encephalitis is underdiagnosed in Bangladesh, as most cases are not picked up by the hospital surveillance. As the median age of JE cases in Bangladesh is 30 years, the introduction of a childhood vaccination program can significantly reduce the number of JE cases and thus reduce the mortality, morbidity and associated socioeconomic burden.

### References:

1. Campbell GL, Hills SL, Fischer M, Jacobson JA, Hoke CH, Hombach JM, et al. Estimated global incidence of Japanese encephalitis: a systematic review. *Bulletin of the World Health Organization*. 2011;89:766–774. doi: 10.2471/BLT.10.085233
2. Cleton NB, Bosco-Lauth A, Page MJ, Bowen RA. Age-related susceptibility to Japanese encephalitis virus in domestic ducklings and chicks. *Am J Trop Med Hyg* 2014;90(2):242–6
3. Turtle L, Solomon T. Japanese encephalitis — the prospects for new treatments. *Nat Rev Neurol* 2018;14, 298–313.
4. Khan AM, Khan AQ, Dobrzynski L, Joshi GP, Myat A. A Japanese encephalitis focus in Bangladesh. *J Trop Med Hyg*. 1981 Feb;84(1):41-4.
5. Monath TP, Heinz FX. Flaviviruses. In: Fields BN, Knipe DM, Howley M, eds. *Fields virology*. 3rd Ed. Philadelphia: Lippincott-Raven, 1996: 961-1034
6. Vaughn DW, Hoke CH Jr. The epidemiology of Japanese encephalitis: prospects for prevention. *Epidemiol Rev*. 1992;14:197–221
7. Paul KK, Sazzad HMS, Rahman M et al. Hospital-based surveillance for Japanese encephalitis in Bangladesh, 2007-2016: Implications for introduction of immunization. *Int J Infect Dis*. 2020 Oct;99:69-74.
8. Yun SI, Lee YM. Japanese encephalitis: the virus and vaccines. *Hum Vaccin Immunother*. 2014;10(2):263-79
9. Solomon T, Dung NM, Kneen R et al. Japanese encephalitis. *J Neurol Neurosurg Psychiatry*. 2000;68(4):405.
10. Solomon T, Thao TT, Lewthwaite P et al. A cohort study to assess the new WHO Japanese encephalitis surveillance standards. *Bull World Health Organ* 2008; 86: 178–186.
11. Phukan P, Sarma K, Sharma BK et al. MRI Spectrum of Japanese Encephalitis in Northeast India: A Cross-Sectional Study. *J Neurosci Rural Pract*. 2021 Apr;12(2):281-289
12. Khan SA, Choudhury P, Kakati S et al. Effectiveness of a single dose of Japanese encephalitis vaccine among adults, Assam, India, 2012-2018. *Vaccine*. 2021 Aug 16;39(35):4973-4978
13. Duque MP, Naser AM, Dos Santos GR et al. Informing an investment case for Japanese encephalitis vaccine introduction in Bangladesh. *Sci Adv*. 2024 Aug 9;10(32):eadp165

## Conclusion

Dear Respected Members of the ACP Bangladesh Chapter,

As we bring this newsletter to a close, I would like to take a moment to express my sincere gratitude to each and every one of you for your continued dedication and involvement in the activities of our chapter. February has presented its share of challenges, yet once again, your unwavering commitment to patient care, professional development, and the advancement of internal medicine in Bangladesh has been truly inspiring.

I also want to acknowledge the lasting contributions of our past governors, Prof. Quazi Tarikul Islam and Prof. H. A. M. Nazmul Ahasan, whose leadership continues to guide and inspire us. Their vision and dedication have laid a strong foundation, one that we build upon as we look forward to the continued growth and success of the ACP Bangladesh Chapter.

Thank you once again for your steadfast commitment and for the vital role each of you plays in our shared mission.

With warm regards,  
Prof. Khan Abul Kalam Azad  
FCPS, MD, MACP, FRCP (Edin)  
Governor, ACP Bangladesh Chapter