



# Semi-annual Bulletin

Half year summary (January - June) 2023  
Volume 3; Issue Number 1; 2023

Designed by Delta Medical  
ME'NA-ISN



Mena\_Isn



menaisnetwork



MENA ISN



mena\_isn

[www.mena-isn.org](http://www.mena-isn.org)



**TABLE OF CONTENTS**

|   |    |
|---|----|
| Word of the volume .....                            | 3  |
| The Influenza Day 2022 .....                        | 4  |
| The Influenza Day 2023 .....                        | 6  |
| News, social media, learning tools .....            | 7  |
| Publications of ME'NA-ISN .....                     | 12 |
| Activities of ME'NA-ISN .....                       | 13 |
| Connections of ME'NA-ISN with other societies ..... | 14 |
| Projects of ME'NA-ISN .....                         | 16 |
| Talks from the MENA-ISN .....                       | 17 |
| Meet with the new members of MENA-ISN .....         | 19 |

**READ OUR PREVIOUS BULLETINS**



## Word of the volume



Dr. Oğuz Abdullah Uyaroğlu is a young internist working at Hacettepe University Faculty of Medicine in General Internal Medicine Unit (Ankara, Turkey). His research area mainly consists of acute care and adult chronic diseases. He is serving as the consultant of the Acute and Emergency Care Units, mainly admitting elderly patients with acute decompensation of chronic diseases; lower respiratory tract infections, organ failure, and acute, undiagnosed conditions. He also interests in Influenza and adult vaccination and has been involved in the Global Influenza Hospital Surveillance Network project as an investigator this year. He is the representative of Turkey (Turkish Society of Internal Medicine) in the Young Internist (YI) group of the European Federation of Internal Medicine (EFIM) and also a member of the Ultrasound Working Group of the EFIM.

Dear colleagues;

I am delighted and proud to share the 5th ME'NA-ISN bulletin with you. It is very meaningful for us to meet you again with the awareness of the duty of constantly improving the scientific excellence of our ME'NA-ISN area. With this awareness, you will see that ME'NA ISN continues its plans, projects and activities also in 2023.

The ME'NA-ISN vision is that the countries in the area have realism and implementation of an influenza immunization program and pandemic influenza preparedness and response plan, with informed incorporation of seasonal influenza vaccination into national vaccination programs as a basis to minimize health, the economic and social repercussions of a possible influenza pandemic. This undoubtedly plays an essential role in mitigating the health, economic and social impacts of a potential influenza pandemic.

In this bulletin you will see the activities of ME'NA-ISN in the first half of 2023. While the impact of Influenza Day 2022 still continues, which, you will remember the day from our Nigerian colleague Dr. Abdul-Azeez A. ANJORIN's pen with the title of "Thought and Impressions about Influenza Day, 2022 Organised by ME'NA-ISN". In addition, the preparations for the 2023 Influenza Day are already in progress. We are pleased to invite you in advance to Influenza Day 2023, an engaging virtual event focused on addressing unmet needs for the flu vaccine, which will take place on 12 October 2023 at 13:30 Istanbul time.

In this Bulletin; you will meet the "Talks from the ME'NA-ISN" section with the lecture of our governing board member Salim Parker about **Influenza in African Children**.

**Besides ME'NA-ISN's online meetings, projects, collaborations with other institutions, you will have the chance to read the latest news and learning tools about influenza.**

To achieve our goal that I have mentioned above, we believe our bulletins address the most recent influenza information in the region.

On behalf of the editorial board, I wish you all a pleasant reading.

**Oğuz Abdullah UYAROĞLU**  
*The Vice-Secretary of the ME'NA-ISN*

## FROM THE INFLUENZA DAY 2022



**Dr. Abdul-Azeez A. ANJORIN (MNYA);**

Head, Department of Microbiology, Lagos State University, Nigeria

Dr. AbdulAzeez Anjorin is a Senior Lecturer, Medical Virologist and certified ProMED-Epi-Core health professional for infectious diseases at the Lagos State University. He is currently the Head, Department of Microbiology and the Team Lead, for Influenza & Other Respiratory Tract Viruses (IORTV) research. He is also the Coordinator/ Principal Investigator, African Infectious Disease Multidisciplinary Research and Grant (AFIDMURG) Group.

He had his training fellowship at the Luxembourg Institute of Health WHO reference Laboratory; and the International Society for Influenza and Other Respiratory Viruses (ISIRV)/ Christian Medical College (CMC) Respiratory Virus School in Vellore. Dr. AbdulAzeez Anjorin bagged a B.Sc (Hons) from the Lagos State University before receiving a PhD from the University of Lagos in 2020. His research findings documented the first coinfection of influenza, malaria parasitaemia, and typhoid fever in pregnancy; and in children; and evidence of influenza A and B coinfection in HIV patients on cART. His research team recently led some projects on COVID-19 vaccination and reported the first adverse events associated with COVID-19 vaccination in Africans from 35 countries.

He has presented papers in diverse countries in Africa, Europe, Asia, and the Middle East, attending over 50 conferences/workshops including different WHO functions like the WHO R&D Consultation: Remaining knowledge gaps for Monkeypox vaccines, (2022); WHO Consultation on COVID vaccines research: Advancing the development of pan-sarbecovirus vaccines (2022), and WHO R&D Blueprint Consultation- COVID-19 Global research & innovation forum (2022); Also, the Africa CDC Stakeholder Engagement Summit on Partnership for Vaccine Manufacturing (2021).

In 2023, AbdulAzeez won the Global Virus Network (GVN) full Scholarship for Annual Short Course in Virology in Baltimore, Maryland; and the NIH-NIAID funded Bacterial and Viral Informatics at the Argonne National Laboratory, Illinois, USA. In 2022, he was awarded the University of Liverpool UK-ICN Travel Support to attend the International Conference on Severe Coronavirus Infection at the King Fahad Medical City, Riyadh. Also, the CEPI Global South Travel Award to attend the 7th World One Health Congress in Singapore (2022). He moderated presentations on innovation in influenza vaccine at the ME'NA-ISM Influenza days in Istanbul, Turkey in 2022. He enjoyed the Lagos State University Conference and Travel Grants (2022, 2021, 2019, 2018 & 2017), and received the Vice-Chancellor Commendation in 2017. He was a recipient of the European-Scientific Working group on Influenza Young Scientist Award in Riga, Latvia-2017; Selected for the H3ABioNet IBT by the Pan-Africa Bioinformatics Network for H3Africa in 2016; Granted the University training support to the Noguchi Memorial Institute for Medical Research, the University of Ghana in 2015; attended the 17th SAAR-LOR-LUX Workshop on Virology Research at the University of Lorraine, France, 2014. FGN-TETFUND PhD Scholarship-2014; UMA-PhD Scholarship-2013; Lagos State Government MSc Scholarship-2010; and the Lagos State Scholarship Awards (2007-2005, 2000-1999).

Dr. AbdulAzeez was inducted into the Nigerian Young Academy in 2021. He is an Academic Editor and member of the PLOS ONE Editorial Board; an International Editor (Associate), of the Pan-African Medical Journal; and an Associate Editor/ Editorial Board Secretary of the Journal of Research and Review in Science.





## Thought and Impressions about Influenza Day, 2022 Organised by ME'NA-ISN

Influenza virus and vaccine hesitancy continue to top the World health organization priority agenda list, and perhaps, may account for a perfect reason MENA'ISN 2022 influenza days' event was tagged influenza: old foe, new view, with major focus on the practicability of various pharmaceutical and non-pharmaceutical interventions especially vaccines.

The two (2) days event was gargantuan with day 1 recording workshop 1 comprising of managing a patient with influenza: Clinical pearls for pharmaceutical and supportive therapy (antiviral treatment, intensive care of the severe patient, and treatment of the complications) with a hot debate centered around whether seasonal influenza should be mandatory for healthcare workers, pros and cons; and workshop 2 on challenges, practical tips and effective communication strategies around vaccination with presentations on communicating flu vaccination to the healthcare professionals, dealing with a vaccine hesitant individual, and a vaccine hesitant patient.

The Day 2 activities were welcomed with plenary session on "One health" approach: thinking out of the box to prevent future pandemics. This was followed by five (5) different sessions, comprising of two (2) parallel sessions. Session 1 was based on: a. Triple trouble in a dangerous time: what have we experienced during the 2021/2022 influenza season; and b. influenza vaccination coverage rates: far from the targets. Different research presentations were delivered afterwards by participants who attended from different countries.

Session 2 entitled: a. Vaccine effectiveness: Just a percentage or thousands of lives saved; and b. Opportunities for innovation in influenza vaccine development was preceded with a satellite symposium by Gen-Era on Identification of respiratory viral pathogens with NGS. More presentations were made by different participants. Presentations by the Award winners was recorded during Award session. Session 3 gave a legendary impression via a panel discussion on influenza pandemic preparedness revisited by Joseph Bresee, Christopher Chadwick, and Wasiaq Mehmood Khan.

The penultimate session 4 featured great presentations under two parallel subthemes- a. risk based approaches to prevent influenza; and b. mass gatherings. The final session 5 ended under separate subthemes- a. combatting the infodemic; b. non-pharmaceutical interventions for the prevention of influenza infection.

The mother of all impressions was the sumptuous intercontinental dinner/ cocktail organised for all the participants from across the globe.



## INFLUENZA DAY 2023

We are delighted to invite you to MENA'ISN's Influenza Day, an engaging virtual event focused on addressing the unmet needs for influenza vaccination. This highly anticipated gathering will take place on October 12, 2023, at 13:30 Istanbul time.

Influenza, commonly known as the flu, continues to pose a significant public health challenge worldwide. MENA'ISN's Influenza Day serves as a platform to raise awareness about the importance of influenza vaccination and discuss the unmet needs in this critical area. By bringing together renowned experts, healthcare professionals, researchers, and stakeholders, this event aims to foster collaboration, knowledge sharing, and innovation in influenza prevention and control.

The main theme of the event revolves around exploring the unmet needs for influenza vaccination. Participants will have the opportunity to delve into key topics such as targets for influenza vaccination and innovative vaccines against influenza. Through thought-provoking presentations, interactive panel discussions, and networking sessions, we aspire to develop actionable strategies to overcome the barriers and challenges associated with influenza vaccination in the region.

Mark your calendars and stay tuned for further updates on registration and the event agenda. Together, let's strive to address the unmet needs for influenza vaccination and make a positive impact on public health.



## News, social media, learning tools

### Flutool Plus is the WHO Tool

Flutool Plus is the WHO Tool, designed to help lower- and middle-income countries in the process of costing of Seasonal Influenza Immunisation Programs. The aim of this course is to promote the dissemination and use of Flutool Plus. The course is meant for national program managers, who are responsible for mobilizing resources to set up sustainable immunisation programs for seasonal influenza.

Specifically, this course will help the participant to:

1. Become familiar with the structure and details of the FLutool PLUS
2. Have a global understanding of the model behind the tool
3. Be able to use the tool to create a costing of the national influenza program
4. Be aware of the optional elements of the tool
5. Be able to consult colleagues online to discuss and solve challenges in using the tool

Read more: <https://openwho.org/courses/influenza-costing-tool>



### Influenza Sentinel Surveillance Training

This course provides web-accessible training on influenza sentinel surveillance for public health practitioners and laboratorians. Participants learn what kinds of data to collect from influenza patients and patient specimens, and the methods of collecting these data. Participants also learn how to analyse, summarise, report, present, and interpret data collected within a sentinel influenza surveillance system. Each of the four modules contains online lecture content, quizzes, a hands-on activity that can be conducted individually or with a group, an instructor's guide for completing the activity, and a cumulative assessment that covers the major teaching points in the module.

Learning objectives: This course aims to:

- provide a public health background on influenza;
- introduce the major steps and concepts involved in conducting public health surveillance; and
- discuss the rationale and objectives of conducting sentinel surveillance for influenza.

Read more: <https://openwho.org/courses/influenza-sentinel-surveillance>





## News, social media, learning tools



### New Study Shows Benefits of Flu Vaccination During Pregnancy as Flu Vaccine Uptake in Pregnant Women Lags

A new study reports that women who got a flu vaccine during pregnancy had a lower risk of certain negative birth outcomes, including fetal death (stillbirth), preterm birth and low birthweight. While CDC recommends flu vaccination during pregnancy, flu vaccine coverage among pregnant women in the United States has fallen 8 percentage points in the past two seasons and preliminary coverage for this season indicates vaccination is down another 5 percentage points from this time last year. This study adds to the body of evidence supporting the benefits of flu vaccination during pregnancy for both mother and baby. With flu activity increasing, now is a good time to get a flu vaccine.

Read more: <https://onlinelibrary.wiley.com/doi/10.1111/irv.13063>

### A new flu is spilling over from cows to people in the U.S. How worried should we be?

In 2011, a farmer in Oklahoma had a bunch of sick pigs. The animals had what looked like the flu.

“Just like a person with respiratory disease, the pigs had labored breathing, maybe a runny nose, cough and potentially a fever,” says virologist Benjamin Hause.

At the time, Hause was working at the company Newport Laboratories, which develops custom vaccines for livestock. “We would detect and isolate pathogens from animals. Then we would grow the pathogens in the lab, kill them and formulate vaccines,” says Hause, who’s now an executive at Cambridge Technologies, another vaccine company.

The Oklahoma farmer took a few samples from the pigs’ noses – a bit like how you swab your nose for an at-home COVID test. He sent the samples to Hause so he could figure out what was making the pigs sick.

To read the remaining of the history written by Michaeleen Doucleff please click here; <https://www.npr.org/sections/goatsandsoda/2023/03/29/1160410178/a-new-flu-is-spilling-over-from-cows-to-people-in-the-u-s-how-worried-should-we->





## News, social media, learning tools



### Avian influenza viruses could spawn the next human pandemic

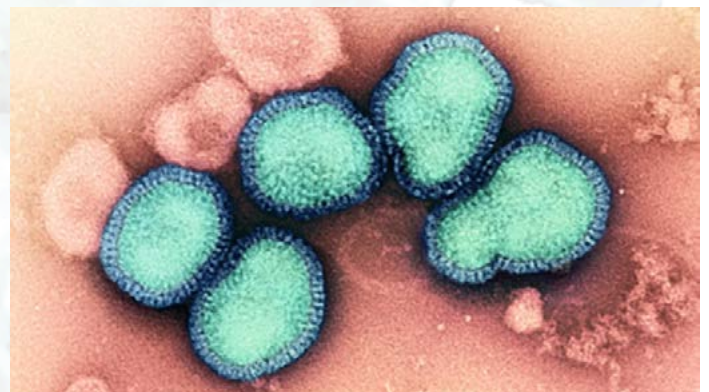
Australian and Chinese scientists have identified significant gaps in the surveillance of influenza viruses, raising concerns about the potential for a future pandemic caused by a new influenza strain. By analyzing almost five decades of animal influenza records, the researchers created a database of over 70,000 records, providing insights into the trends and potential transmission of these viruses. The study highlights the need for improved monitoring and tracking of viral outbreaks in animals to prevent their emergence in human populations. The research suggests that bird flu, due to its prevalence and ability to mutate, poses a high risk of becoming zoonotic and transmitting from animals to humans. The study emphasizes the importance of proactive surveillance and data sharing to detect new influenza strains and mitigate the impact of future viral pandemics

Read more: <https://www.sydney.edu.au/news-opinion/news/2023/03/13/avian-influenza-viruses-could-spawn-the-next-human-pandemic.html>

### Clinical trial of mRNA universal influenza vaccine candidate begins

A clinical trial has commenced at Duke University to evaluate an experimental universal influenza vaccine developed by the National Institute of Allergy and Infectious Diseases (NIAID). The Phase 1 trial aims to assess the safety and immune response induced by the vaccine, named H1ssF-3928 mRNA-LNP. Up to 50 healthy volunteers aged 18-49 will participate in the trial, receiving different dosages of the experimental vaccine. The study will also include a group receiving the current seasonal influenza vaccine for comparison. The goal is to develop a universal flu vaccine that provides long-term immunity against multiple strains, potentially eliminating the need for annual vaccinations. The trial is part of the Collaborative Influenza Vaccine Innovation Centers (CIVICs) program initiated by NIAID in 2019 to support the development of broadly protective flu vaccines. The experimental vaccine utilizes a portion of the flu protein called hemagglutinin to induce a broad immune response. This vaccine, using an mRNA platform, is one of several being explored to find a safe and effective universal flu vaccine.

Read more: <https://www.nih.gov/news-events/news-releases/clinical-trial-mrna-universal-influenza-vaccine-candidate-begins>



## News, social media, learning tools

### Long-COVID patients show abnormal brain activity on MRI while doing memory tasks

Long-COVID patients with neuropsychiatric symptoms such as brain fog showed abnormal brain activity on magnetic resonance imaging (MRI) while completing memory tests, with a shift from activity in brain areas normally used for memory to other brain regions, shows a study published yesterday in *Neurology*.

Long-COVID participants reported a high rate of problems with concentration (92.9%) and memory (78.6%), confusion (64.3%), headaches (57.1%), visual disturbances (50%), gait disturbances (50%), burning sensations in the extremities (42.9%), and incoordination (39.3%).

Source: CIDRAP, University of Minnesota

Read more: <https://www.cidrap.umn.edu/covid-19/long-covid-patients-show-abnormal-brain-activity-mri-while-doing-memory-tasks>



### Are repeat COVID infections dangerous? What the science says

When the coronavirus pandemic began in early 2020, the SARS-CoV-2 virus was a strange and terrifying adversary that plunged the world into chaos. More than three years later, the infection's symptoms are all too familiar and [COVID-19 is here to stay](#) – part of a long list of common diseases that infect humans. Experts estimate that the majority of the world's population has been infected at least once; in the United States, some estimates suggest that as many as 65% of people have had multiple infections<sup>1</sup>. And it's likely that in the decades to come, we're all [destined to get COVID-19 many more times](#).



Researchers disagree over how bad it is to be reinfected, and whether COVID-19 can cause lasting changes to the immune system.

Source: Nature

Read more: <https://www.nature.com/articles/d41586-023-01371-9>



## News, social media, learning tools

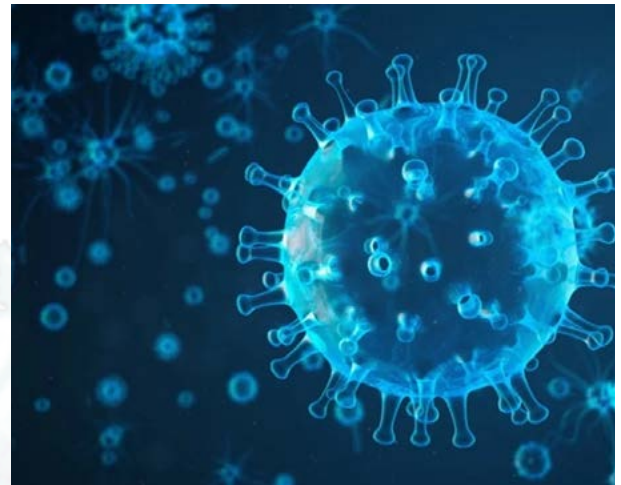
### What is the risk for symptomatic H5N1 virus infection in humans?

The researchers from the CDC assessed the risk of H5N1 infections among individuals exposed to wild and domesticated birds potentially infected with the HPAI H5N1 clade 2.3.4.4b virus.

Overall, the findings suggested that the risk of transmission of the H5N1 virus from infected birds to humans was very low. However, the researchers cautioned that it is important to monitor exposed individuals, and the increasing number of influenza A(H5) infections among other mammals indicates the potential for the risk profile of the virus to change very quickly.

Source: News Medical Life Sciences

Read more: <https://www.news-medical.net/news/20230427/What-is-the-risk-for-symptomatic-H5N1-virus-infection-in-humans.aspx>



### WHO launches new initiative to improve pandemic preparedness

The COVID-19 pandemic response has demonstrated what can be achieved with political commitment, community engagement and funding. At the heart of this work is to ensure equity to be ready for the next pandemic together. Whole-of-society action is needed to make the progress outlined in this Call to Action. Implementation should therefore strengthen the resilience of communities; maintain, sustain, and build on routine systems; and leverage broader capacities for emergency preparedness and response.

Source: World Health Organization

Read more: <https://www.who.int/news/item/26-04-2023-who-launches-new-initiative-to-improve-pandemic-preparedness>

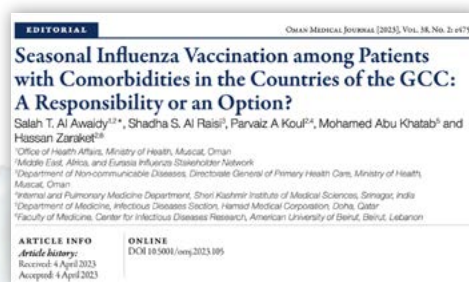


## NEW PUBLICATION

- 1 **Seasonal Influenza Vaccination among Patients with Comorbidities in the Countries of the GCC: A Responsibility or an Option?**

<https://doi.org/10.5001%2Fomj.2023.105>

[Read](#)



- 2 **Determinants of parental seasonal influenza vaccine hesitancy in the Eastern Mediterranean region: A cross-sectional study**

[DOI 10.3389/fpubh.2023.1132798](https://doi.org/10.3389/fpubh.2023.1132798)

[Read](#)



## Publications of ME'NA-ISN

- 1 **Influenza surveillance in Middle East, North, East and South Africa: Report of the 8th MENA Influenza Stakeholders Network**

<https://doi.org/10.1111/irv.12628>



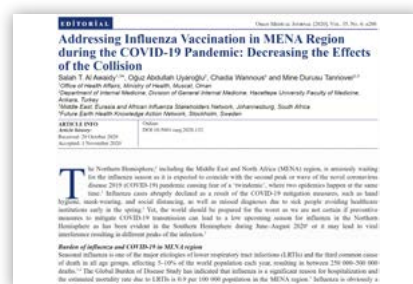
- 2 **Influenza vaccination situation in Middle-East and North Africa countries: Report of the 7th MENA Influenza Stakeholders Network (MENA-ISN)**

<https://doi.org/10.1016/j.jiph.2018.07.003>



- 3 **Addressing Influenza Vaccination in MENA Region during the COVID-19 Pandemic: Decreasing the Effects of the Collision**

[doi: 10.5001/omj.2020.132](https://doi.org/10.5001/omj.2020.132)





## Activities of ME'NA-ISN

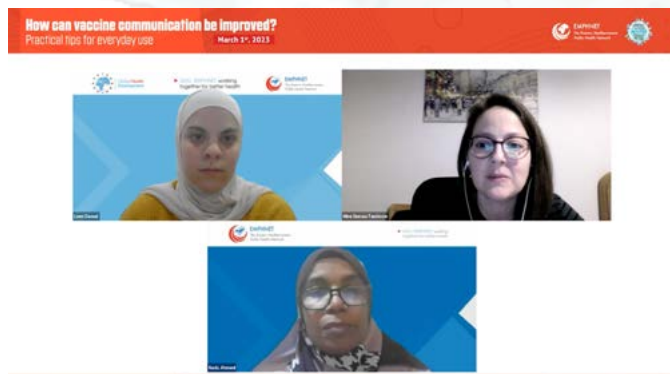
### How Can Vaccine Communication Be Improved?

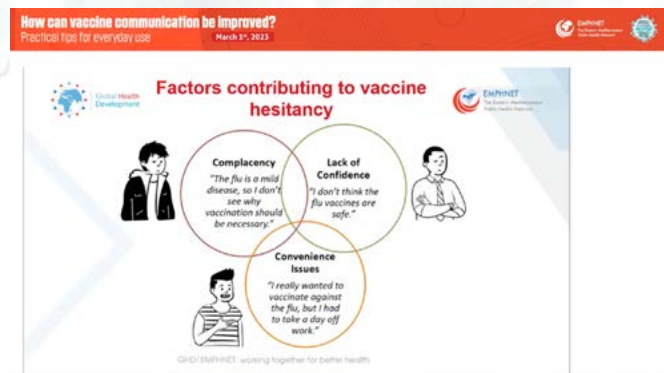


their daily interactions to improve vaccine communication and ultimately contribute to higher vaccine acceptance rates. The webinar hosted prominent field experts from the MENA region. Dr. Nada Ahmad, public health specialist at EMPHNET, discussed “communicating flu vaccination to the healthcare professionals”. Her presentation was followed by a presentation on dealing with a vaccine hesitant individual/parent by Ms. Leen Daoud, who is the technical officer at EMPHNET. Dr. Mine Durusu Tanriover, MENA-ISN secretary, moderated a very engaging meeting. The meeting discussed very important topics such as the importance of vaccinating healthcare workers, barriers and motivations affecting uptake, and challenges facing parents regarding vaccination.

ME'NA-ISN held a webinar titled “How can vaccine communication be improved? Practical tips for everyday use” in collaboration with the Eastern Mediterranean Public Health Network (EMPHNET) on March 1st, 2023 at 19:00 Turkey time. The webinar aimed to equip participants with practical tips and strategies they can apply in

Watch the full webinar on: <https://mena-isn.org/blog/webinar-how-can-vaccine-communication-be-improved-practical-tips-for-everyday-use/>





# Activities of ME'NA-ISN

## Establishing the Case for Prioritization of Life-Course Immunization



ME'NA-ISN organized a webinar titled “Establishing the Case for Prioritization of Life-Course Immunization” as part of the “Advancing Equity in Adult Immunization” series. In collaboration with the International Federation for Ageing (IFA) and Vaccines 4 Life (V4L), the webinar took place on February 23rd, 2023, at 09:00 EST. The webinar was moderated by Ms Anusha Khan from IFA. The primary objective of the webinar was to emphasize the importance of immunization as a central component of comprehensive prevention strategies. The aim was to address barriers to access, promote universal protection, and ensure equitable distribution of vaccines

throughout an individual’s lifespan.

Distinguished experts from the MENA region participated in the webinar, including Dr. Salah Al Awaidy, Dr. Parvaiz Koul, and Mr. David Sinclair from the International Longevity Center, UK. Mr. David Sinclair focused his presentation on the challenges of aging and the significant health inequalities faced by governments. He highlighted the vital role of illness prevention as part of the solution.

Dr. Parvaiz Koul followed with a presentation underscoring the urgency of life-course immunization and the importance of healthy aging. He shed light on barriers to immunization and inequities in vaccine uptake, providing examples from India.

Dr. Salah Al Awaidy’s presentation, titled “Life Course Immunization and Integration: Lessons Learned from GCC Countries,” delved into insights and integrations that can enhance vaccine uptake. He also discussed existing gaps in immunization, drawing examples from Gulf countries.

The webinar provided a platform for expert discussions and knowledge-sharing, fostering a greater understanding of the significance of life-course immunization and the need for equitable access to vaccines.

Watch the full webinar on: <https://mena-isn.org/blog/ifa-webinar-establishing-the-case-for-prioritization-of-life-course-immunization/>

### The world is ageing



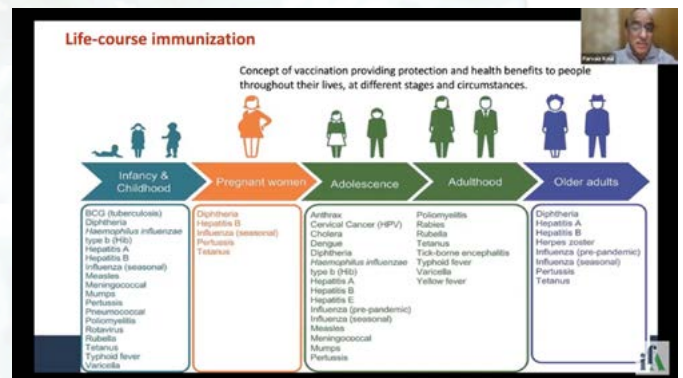
By 2050, the proportion of people aged 50 and over will increase by 11 percentage points, resulting in 40% of the G20 population being aged over 50 (ILC Delivering Prevention).

stuart.mcdonald @Aging4Life

Only around 100 people have lived for more than a million hours

Only approximately 100,000 people in the UK were older than the Queen when she died in 2022 (ILC: Longevity of Royal Family)

ilc  
International Longevity Centre UK



MIDDLE EAST, EURASIA AND AFRICA  
INFLUENZA  
STAKEHOLDERS  
NETWORK  
ME'NA-ISN

life-course immunization & integration: lesson learned from GCC countries

Salah Al Awaidy, MD  
ME'NA-ISN Chairperson



## Connections of ME'NA-ISN with other societies

### Influenza Vaccine Uptake Workshop

Addressing under-vaccination requires a nuanced and real-time understanding of the root causes of this problem. Strategies to increase vaccine acceptance and uptake need to be multicomponent, evidence-based, culturally appropriate, and context-specific. Many governments are becoming increasingly concerned about the low **uptake of influenza vaccination**. The COVID-19 pandemic has increased awareness of the importance of protecting adults against infectious diseases like influenza, particularly as many countries predict winter “twin-demics” of COVID-19 and influenza. The European Centre for Disease Prevention & Control ([ECDC](#)) estimates that in a typical year, 5% to 15% of the population is affected by influenza, leading to between 3 million and 5 million cases globally.

In February 2023, Irimi ([website](#)) and MENA-ISN held a workshop to help countries and regional partners to start to identify the key barriers to influenza vaccine uptake, which saw fruitful discussions and experiences shared between participants from Qatar, Tunisia, Oman, UAE, Lebanon, KSA, Jordan, Bahrain.

This multistakeholder regional initiative aims to:

1. Foster collaboration towards a shared objective - higher influenza vaccination rates - between diverse national and regional stakeholders
2. Develop the MENA influenza community of practice by collecting and sharing country case studies on successful vaccination interventions to increase influenza vaccination rates.
3. Support countries and local/regional partners to meet their influenza vaccine coverage goals by increasing demand and uptake in communities through the implementation of measurable interventions.

A Call-for-Action highlighting the main barriers and recommendations discussed during the workshop will soon be available and widely communicated to everybody working to protect the vulnerable from Influenza in the region. Stay tuned!”

#### Who is Irimi?

Irimi Company develops and implements social and behaviour change policies and programs for public health. With a specific expertise in vaccination demand, they draw upon the current evidence, new data generation, community insights through social listening and behavioural studies to develop, implement and monitor impactful programs.



To learn more about Irimi; <https://irimi.co/fr/>

## PROJECTS of ME'NA-ISN

### VACCINATION ACCEPTANCE, CONFIDENCE AND CONVICTION ON INFLUENZA IN THE MIDDLE EAST, EURASIA AND AFRICA AMONG HEALTH CARE PROVIDERS (VACCIMENA- HCP) PROJECT 2023

Annual vaccination is the most effective way to prevent and control the health and economic burden caused by seasonal influenza. Healthcare workers (HCWs) play a crucial role in vaccine acceptance and advocacy for their patients.

VACCIMENA- HCP study aims to explore the barriers and drivers of healthcare workers (HCWs) vaccine acceptance and advocacy in countries from the Middle East, Eurasia, and Africa.

After the launch of study in December 2022, healthcare workers (HCWs) from 10 countries from the Middle East, Africa and Eurasia regions (Azerbaijan, Egypt, Libya, Morocco, Nigeria, Pakistan, Russia, Saudi Arabia, Tunisia, and Turkiye) participated. Participants were recruited via opportunity sampling with an initial minimum overall target of 250 HCWs per professional category (medical practitioners, nurses, and pharmacists).



Between 20th December 2022 and 1 March 2023, a total of 872 participants voluntarily completed the survey either via an online questionnaire or a paper-based version of the questionnaire. The results of the study will help to shape the influenza vaccination policies in the region by providing baseline information to shape improvement projects through behavior change of the HCWs.



## TALKS FROM MENA-ISN

### Influenza in African Children: Need for Action

#### Salim Parker

It is known that children, especially children under five, are at risk of influenza complications. Up to 10% of children under 14 see a doctor with influenza like illness (ILI) annually.<sup>1</sup> About 90 million children are estimated to acquire the infection every year. In one study 33% of infants followed up from birth to one year suffered from influenza. Studies have also shown that age specific hospital admission for influenza is the highest in certain years amongst infants. There is data for children in the developed countries. Unfortunately, that does not apply to data in Africa about influenza and especially for data in African children. In 2014 only three African countries (South Africa, Algeria and Morocco) had established influenza vaccination policies.<sup>2</sup>

Influenza causes up to 650 000 deaths annually with the highest mortality in sub-Saharan Africa. Surveillance in 15 African countries from 2006-2010 revealed that the overall proportion of influenza positivity was 21.7% in ILI cases and 10.1% in severe acute respiratory infection. The per-capita influenza associated hospitalisation rate in children younger than 5 years old is estimated to be 174 per 100 000 each year in Africa, much higher than the 53 per 100 000 each year in Europe. It is known that children are more likely to acquire the virus (attack rates can be up to 20% in certain seasons), have symptoms, suffer from complications and shed the virus for a longer period compared to adults. They are also more likely to spread it to household contacts.

Southern and Northern Africa shows distinct seasonal influenza patterns whilst studies vary closer to the tropics. In a Kenyan study, influenza viruses circulated year-round and was shown in both the child as well as the adult population.<sup>3</sup> It was shown that occupational and school-based settings showed a higher prevalence of influenza viruses with no regular seasonal pattern identified. Another study however showed that the Kenyan influenza season mostly corresponds with the southern hemisphere winter, with peaks during wet months: March-April, October-November and cold month of July.<sup>4</sup>

Numerous factors have been identified that put African children in low-income countries at higher risk for influenza complications.<sup>2</sup> These include poor nutrition and socioeconomic conditions, a higher prevalence of co-infections such as HIV, tuberculosis, and *Streptococcus pneumoniae*, and poor access to health care. All these factors may contribute to seasonal influenza infections having a greater role in respiratory disease related morbidity and mortality in Africa. Despite all these factors, there seems to be not much interest in the role of influenza vaccine in the affected countries with economic factors likely playing a major role.

There may be aspects of the influenza vaccine that may affect its efficacy in certain African countries. These include the year-round transmission of influenza within the tropics affecting the current vaccine strains,



*Salim Parker is a travel medicine practitioner in Cape Town. He is a honorary research associate in the Division of Infectious Diseases and HIV Medicine at the University of Cape Town and immediate past president of the South African Society of Travel Medicine (SASTM). He serves on the Liaison Committee of the International Society of Travel Medicine (ISTM) and collaborates with the Global Centre for Mass Gathering Medicine (GCMGM) on Hajj research projects.*

## TALKS FROM MENA-ISN

high HIV prevalence, and reduced maternal antibody transfer with malaria infection. Work has been done in countries such as South Africa and Mali on the efficacy of influenza vaccination in pregnant women and their infants and benefit was shown. The study in Mali showed that such vaccinating pregnant women would be cost-effective in settings if vaccine can be obtained, managed, and administered for US\$1.00 or less per pregnant woman. The additional potential health economic benefits of reducing the load of bacterial pneumonia, indirect benefits due to reduced transmission, and effect on antibiotic use should also be considered. Of course, more data and surveillance is paramount. It has to be borne in mind that as the burden of influenza is high in Africa, even low vaccine efficacy may lead to a greater number of absolute cases prevented and with substantial public health benefits.

It is evident that there is a paucity of data about influenza in African children. The limited data shows that influenza needs to be addressed urgently in that group. Influenza vaccination must be considered in such vulnerable populations and studies, advocacies and policies have to be developed by all interested parties.

1. Ruf BR, Knuf M. The burden of seasonal and pandemic influenza in infants and children. *Eur J Pediatr*. 2014 Mar;173(3):265-76. doi: 10.1007/s00431-013-2023-6. Epub 2013 May 10. PMID: 23661234; PMCID: PMC3930829.
2. Lindsey BB, Armitage EP, Kampmann B, de Silva TI. The efficacy, effectiveness, and immunogenicity of influenza vaccines in Africa: a systematic review. *Lancet Infect Dis*. 2019 Apr;19(4):e110-e119. doi: 10.1016/S1473-3099(18)30490-0. Epub 2018 Dec 12.
3. Umuhoza T, Bulimo WD, Oyugi J, Schnabel D, Mancuso JD (2020) Prevalence and factors influencing the distribution of influenza viruses in Kenya: Seven-year hospital-based surveillance of influenza-like illness (2007–2013). *PLoS ONE* 15(8): e0237857. <https://doi.org/10.1371/journal.pone.0237857>
4. Matheka DM et al. Overview of influenza virus infections in Kenya: past, present and future. *Pan African Medical Journal*. 2013; 14: 138. doi:10.11604/pamj.2013.14.138.2612



## Meet with the new members of MENA-ISN



**Leen Daoud**

Leen Daoud is a Public Health Professional working at GHD|EMPHNET. Being part of the Polio and Routine Immunization Team, as well as in the Public Health Emergency Management Center, Leen is serving as a focal point for projects tackling the infodemic as well as vaccine demand and hesitancy. Leen also works in other different public health projects including strengthening and evaluating surveillance systems and supporting VPDs outbreak preparedness and response.



**Peri Sohrabi  
-Mollayousefi**

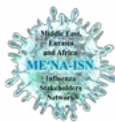
Peri Sohrabi -Mollayousefi, MD is a specialist doctor in Microbiology and Clinical Microbiology working in the University of health sciences, Bakirkoy Dr. Sadi Konuk Training & Research Hospital, Microbiology Laboratory. After graduating from Medical Faculty (1998), she aimed "Genetic Science" as her target branch to improve and she started to work as voluntary. She cultivated herself in "PCR, Molecular Microbiology and Virology especially in Cytomegalovirus". Now she is working on Molecular Microbiology, Viral Microbiology especially Common viral respiratory diseases, Cytomegalovirus (CMV), Human immunodeficiency Virus (HIV), Viruses which cause Cancers and Cancers on Genetic substructure.



**Adegboyega Taofeek  
Tope**

Adegboyega Taofeek Tope, PhD (Biology/Biotechnology), M.Sc. (Medical Microbiology), B.Sc. (Hons) (Microbiology), Diploma (Computer Operations)

Taofeek is a self-motivated and enthusiastic teacher, trainer, researcher and scholar whose research interest covers etiology and risk factors of diseases, immune response to diseases and serology. He has endured a successive and non- stop academic sojourn of reading, writing and researching in microbial biotechnology and biology leading to the award of three higher academic degrees from 2009 to 2019 in Nigeria and abroad. He has acquired extensive experience in infectious disease program design, epidemiology, research methodology, strategic planning, implementation, and operational research with a focus on global care and treatment of people living with communicable diseases



READ OUR PREVIOUS BULLETINS

## Editorial Board



Oğuz Abdullah Uyaroğlu



Farah Massoud



Hyder Mir

## Scientific Board



Parvaiz A Koul



Salah Al Awaidy



Mine Durusu Tanriover

**YOU ARE VERY WELCOME TO CONTRIBUTE  
TO THE ME'NA-ISN BULLETIN!**

Please contact: Email: [secretariat@mena-isn.org](mailto:secretariat@mena-isn.org)



64 Southwark Bridge Road, London SE1 0AS  
[info@deltamedicalcommunications.com](mailto:info@deltamedicalcommunications.com)  
+44 1895 903451

