



MENA INFLUENZA STAKEHOLDERS NETWORK NEWSLETTER - 2 May 26, 2017

6th MENA INFLUENZA STAKEHOLDERS NETWORK (MENA-ISN) Meeting Report

6th MENA-ISN meeting was held on 6-7 April, 2017 in Prague. A total of 20 participants from 12 countries attended the meeting.



Members at 6th MENA-ISN Meting, Prague, Czech Republic. MENA-ISN initiative continues growing and providing high level of training on all aspects of influenza to prominent stakeholders in the region with the aim of increasing awareness and reducing burden of influenza in MENA region. Pakistan was represented for the first time with two members, Dr. Yusuf Kamal Mirza and Dr. Muhammad Nadeem Khawaja. New members from Kingdom of Saudi Arabia, Dr. Fatima Younis Al Slail, from Morocco, Dr. Dahbi Zahra, and from Jordan Dr. Mohammad Ratib Ali Surour also joined the meeting in Prague. With new additions, the MENA-ISN community is becoming richer, more diverse and highly motivated in sharing country specific information and developing ideas on how to increase influenza awareness and vaccination coverage rates to protect people against influenza in the regional countries. talked about the vaccine virus selection process and emphasized on the importance of increasing vaccine production capacity and use of seasonal influenza vaccines as part of pandemic preparedness.

Atika Abelin delivered a talk on global advocacy initiatives for influenza vaccination. She started her talk on reminding that influenza immunization policy is driven by global, regional and national recommendations. She emphasized on the fact that seasonal



MENA-ISN listening to the talk given by Dr. Wenging Zhang through SKYPE. Although Dr. Zhang was not present in the room, the audience gave their full attention to her talk.

During the 6th meeting, each country representative summarized the country objectives for the upcoming 3 years, country influenza epidemiology for current season and presented the achieved actions set for 2016-2017 influenza season. The meeting was very vibrant with many discussions and ideas that were motivating for all members.

External speakers of this meeting were Dr. Wenging

Zhang, WHO/ Geneva and Atika Abelin, Sanofi Pasteur, France. Dr. Zhang joined the meeting through Skype and delivered comprehensive information on burden influenza and WHO projects for estimating the global burden of influenza with newly developed tools. Dr. Zhang also draw attention to reality of pandemics emphasizing the importance of vaccines in mitigation of pandemics and WHO's position in improving seasonal influenza surveillance in order to be better prepared for the fu-



ture pandemics. She also Atika Abelin presenting on global initiatives for influenza vaccine advocacy.

influenza vaccination is an underutilized public health tool in all regions of the world which could be due to insufficient access to vaccination and lack of political commitment to seasonal influenza vaccination programs. She then went on listing the international organizations with vaccine advocacy programs that are supported by International Federation of Pharmaceutical Manufacturers (IFPMA). Among those inorganizations ternational with advocacy programs were World Medical Association (WMA), World Heart Federation (WHF), Interpharmaceutical national

Federation (FIP), European Scientist Working on Influenza (ESWI), Asia Pacific Alliance for the Control of Influenza (APACI), National Foundation for Infectious Disease (NFID), International Council of Nurses (ICN).

She gave the MENA-ISN members the message on the importance of communicating the evidence based burden of disease and benefit of influenza vaccination at public and policy making level. She finished her talk by a statement from Marie-Paule Kieny, WHO's assistant director general in charge of health systems and innovation, who advised policymakers to "stop hiding behind technocratic and scientific lingo and to emphasize the fact that vaccination is a "social responsibility" key to protecting not just individuals, but entire populations from infectious diseases."

MENA-ISN members Dr. Suleiman Abusrewil (Libya), Nur Aksakal (Turkey), Hisham Tarraf (Egypt), Amine Slim (Tunisia), Masoud Ghasemi (Iran) had been invited by WHO/Geneva to attend "Third WHO Consultation on the Global Action Plan for Influenza vaccines (GAP III)". During MENA-ISN meeting a summary of what was discussed during GAP III was presented to all MENA-ISN members. The presenters emphasized on the commitment of WHO to reduce the burden of influenza around the globe and for preparation of the next pandemic.



MENA-ISN members discussing the topics presented during WHO GAP III meeting in November 2016.

Country Presentations Actions Achieved for 2016-2017 Season



Algeria

Dr. Fawzi Derrar, Algeria. Prsenting Country Action Plan for 2017-2018 Season

Epidemiological Update: According to Dr. Derrar Influenza B viruses were dominating in 2016-2017 season with both B Yamagata and B Victoria in circulation. All circulating Influenza A viruses were H3N2. No information was available on mortality cases.

Key Actions Achieved: New target populations such as diabetic patients and pregnant women, has been included in surveillance. A vaccination campaign/press conference with involvement Ministry of Health (MoH) was held for increasing awareness and vaccine uptake. Influenza is included in national com-



munication plan with identified spokesperson for official media, used media intervention for advocacy.

Country objectives for the upcoming 3 years:

1. Improve the laboratory network

2. Estimate the severity of influenza through SARI surveillance

3. Estimate the incidence of influenza in high risk populations: pregnant women, diabetic patients and infants

4. Estimate the vaccination coverage rate among risk groups.

Egypt

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Dr. Omaima Idris and Dr. Hisham Tarraf presenting country updates from Egypt.

Dr. Hisham tarraf and Dr. Omaima Idris presented the country data for Egypt.

Epidemiological Update: Both Influenza A and B viruses circulated with Influenza A (H3N2) viruses dominating. Mortality data is not available.

Key Actions Achieved: Surveillance improved through MoH and NAMRU, vaccination increased from 800.000 doses to 1.400.000 doses. Medical Society meetings, TV programs, media interviews and posters were used for social mobilization, education/ awareness. Several press conferences including MoH and decision/policy makers were held for vaccine advocacy and policy.

Country Objectives for the Upcoming 3 Years:

1. Improve surveillance and disease burden data

2. Improve evidence-based communication on influenza burden and benefits of vaccination.

3. Inclusion of influenza vaccination in "National Vaccination Program" and in "National Disease Guidelines" for high risk population.

4. Increase vaccination of HCPs

5. Increase influenza vaccine coverage rates to achieve protection of high risk groups.



Speakers in their concluding remarks stated that HCWs are the main influencers and prescribers of influenza vaccine in Egypt. Therefore, great effort should be given to collaborate with HCWs. In addition, in the absence of compulsory vaccination a local Influenza Stakeholder Network (advisory board) consisting of key opinion leaders in scientific community and decision makers is necessary to communicate with various societies dealing with high risk groups to include influenza vaccination in "national guidelines" with strong recommendation. Speakers draw attention to continuing human infections with H5N1 and poultry infections with a new virus, H5N8. Speakers also indicated that a PIP program must be developed with MoH and EMRO to avoid difficulties faced during 2009 pandemic. However, while attention is being given to emerging viruses for possible emergence of a new virus, seasonal influenza, against which effective vaccines are available, should not be ignored and vaccines should be utilized to reduce the burden of seasonal influenza. In addition Dr. Omaima Idris stated that in some private clinics specific for pregnant women influenza vaccine is recommended at all stages of pregnancy.



Beheshti Medical University to bring influenza at attention of academicians in order to increase awareness and influenza vaccine coverage rates. An expert group of 10 members in collaboration with Atherosclerosis Society has been established to evaluate influenza and atherosclerosis in the elderly population and a proposal has been submitted to MoH. Also several brochures on disease awareness have been shared

Iran



Dr. Mardani presenting country updates from Iran.

Epidemiological Update: Influenza epidemics started on week 41 and ended in week 7 with Influenza A (H3N2) viruses dominating.

Key Actions Achieved: Dr. Mardani indicated that surveillance is well functioning with better communication of patient PCR results. Vaccination coverage is increased in some patients. Two seminars were held in October and November 2016 the latter at Shahid with field doctors.

For advocacy and policy, communication with decision makers at MOH level is ongoing. Several topics are discussed with decision makers. Some those topics are appropriate use of budget and human resources, HCWs and general population. A local influenza stakeholder network (IPWI) had been established two years ago and this MOH and National Influenza Reference Laboratory are represented in IPWI with 2 members. Infectious Diseases of Shadid Behesthi is in continuous communication with other professional societies such as ISCMID, Atherosclerosis Society, Diabetes Association, Pediatric Infectious Disease Research Center and Endovascular Research Center.

Dr. Mardani stated that in addition to all activities listed above, research is also conducted to understand the vaccination coverage rates in patients living with HIV and in doctors giving care to these patients at specialized clinics. The vaccine coverage rate was 56 % in registered PLWH and 74% in HCWs working with these patients. No deaths were reported from either PLWH or HCWs. At the same time, among general population 28576 individuals were hospitalized thro-

Jordan



Dr.Mohammad Ratib Ali Suour, MoH, Jordan presented influenza activity data from Jordan.

Epidemiological Update: Season started at week 44 and ended at week 10 with Influenza A(H3N2) dominating and low B circulation.

Key Actions Achieved: Jordan has become a member of MENA-ISN recently. Therefore, Dr. Surour did not have an action plan to be presented for 2016-2017 season. Instead he gave a presentation on how Jordan handled the 2009 pandemic and what lessons were learnt. He also indicated that Jordan has a wellorganized health system with well-trained public health officers, well-established surveillance system and infrastructure with support of WHO and CDC.

Most importantly, Dr. Surour indicated that there is a political commitment to reduce the burden of influughout the country due to SARI, 20726 of which were sampled for influenza virus, 3216 samples were positive for Influenza. Out of 1047 patients died of SARI, 254 were positive for influenza (%24.2).Vaccination coverage rate among these patients were unknown. Dr. Mardani also presented a study conducted by his research team to determine the risk factors for hospitalization and death in pregnant women in Iran. Dr. Ghasemi presented the elderly vaccination proposal to MoH.. The aim of this project was to inform policy makers about why elderly patients at increased risk for influenza complications and benefit of vaccination. The project also aims to educate elderly and HCW on importance of elderly vaccination.

Country Objectives for the Upcoming 3 Years:

1. Further improve influenza surveillance system especially dissemination of data

2. Increase vaccination coverage rate to prevent disease mortality

3. Expand vaccine recommended risk groups and provide vaccine to these groups free of charge including pregnant women, elderly, health care providers.



enza.

Country Objectives for the Upcoming 3 Years:

1. Strengthen the surveillance and early warning system for influenza

2. Develop targeted seasonal influenza vaccination program

3. Improve vaccine coverage for HW / high risk gro-ups

4. Raise awareness through training, health education and communication

5. Strategic stockpiling of antiviral drugs and personal protection equipment (PPE's).

Kingdom of Saudi Arabia

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Dr. Musallam Abu Hassan, MoH, presenting country influenza action plans fro KSA.



Dr. Fatima Younis Al Slail, MoH, presenting on diabetes problem in KSA.

Epidemiological Update: Since surveillance system was just established in January 2017 in 5 regional labs in 6 regions (hospital and PHC) in KSA no systematic information is yet available. However, Dr. Musallam indicated that laboratories reported A (H1N1) viruses.

Key Actions Achieved: Vaccination of HCWs, pregnant women, patients with chronic diseases, young children, elderly and Pilgrims is targeted and continuously increasing. Different vaccination channels are also being searched in order to achieve better vaccination coverage. Dr. Musallam stated that to increase the awareness public and HCW education is also ongoing.

Country Objectives for the Upcoming 3 Years:

1. To reach 30% VCR in whole population

2. To have a WHO certified reference laboratories as part of GISRS in order to share viruses for vaccine virus selection

3. To have a tracker to define the VCR among each

target group

4. To raise the educational level of HCPs to reach 85% VCR among HCWs

5. To raise the public awareness level to reach the targeted VCR.

Dr. Musallam indicated that there is an ambitious commitment to achieve desired target rates in especially risk groups recommended by WHO and that establishment of surveillance will support the vaccination program with locally generated data.

Dr. Fatima Y. Al Slail presented diabetes problem in KSA indicating the need for recognition and protection of diabetic patients from influenza. Annual Influenza vaccination is recommended and included in the National Guide for Diabetes Management since 2008. Dr. Al Slail stated that there is intense awareness campaigns for HCWs with support from MoH to achieve the vaccination coverage rate of 50% among diabetes patients along with other people with chronic diseases.

Libya

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Dr. Suleiman Abusrewil presenting influenza action plan for Libya.

Epidemiological Update: According to country surveillance report influenza like illness activity started in November which is somewhat delayed compared to previous two seasons. However due to political distress and armed conflict surveillance laboratory was not able to conduct surveillance. Therefore, no lab confirmation was available. However he indicated that based on ILI definition of WHO, low to moderate level influenza activity was detected compared to previous seasons which could be due to increased vaccination coverage.

Key Actions Achieved: Dr. Abusrewil stated that, national influenza sentinel surveillance for ILI and SARI at primary health care and hospitals is established. Laboratory personnel have been trained at WHO reference laboratory abroad. Flu vaccination program has been strengthened and gradually upgraded to include more risk groups. Up to 33% of targeted groups have been vaccinated this year. Influenza vaccination coverage rate has been dramatically inc-



reased. Awareness campaigns have been regularly held in the form of seminars and workshops in addition to immunization and promotion week for HCWs, decision makers and general public (especially the risk groups). Libyan National Advisory Committee on Influenza Control (LACIC)' has been established and has released recommendations and guidelines for flu vaccination that is upgraded periodically. LACIC also holds influenza campaigns to increase the vaccination coverage rates.

Country Objectives for the Upcoming 3 Years:

1. To build a national influenza center with a reference laboratory (NIC)

2. To increase epidemiological capacities in surveillance

3. To contribute to the global vaccine development through sharing virus isolates and sequences.

4. To increase use of seasonal influenza vaccine to cover all risk groups.



pregnant women have been organized to educate and increase awareness.

Country objectives for the upcoming 3 years:

1. Increase evidence based data on influenza circulating strains by supporting influenza surveillance laboratory for future designation as support reference lab for NIC

2. Increase awareness about influenza and importance of immunization

3. Establish a country advisory board to generate recommendation for immunization of risk groups



Lebanon

Dr. Ghassan Dbaibo presenting action plan for Lebanon.

Epidemiological Update: Lebanon report to WHO for the past two seasons. Influenza activity started at week 49 and ended at week 7. Both Influenza A and B viruses were circulating with Influenza A (H3N2) dominating. All B viruses with lineage reports were from Yamagata lineage.

Key Actions Achieved: Sentinel and SARI surveillance has been established. Vaccination coverage rate has been increased to 4.5% in children and to 6% in whole population. Workshops for various target groups such as army, companies, diabetic patients,

4. Develop speakers network to carry out education for public and HCPs by specialty communication on Influenza to key stakeholders: MOH and societies

Dr. Dbaibo also presented ongoing influenza rese-

arch at his institution emphasizing the importance of scientific data generation and strain determination. He indicated that there has been some unusual influenza A viruses that need further study to understand whether these viruses are different from circulating viruses.



3. Increase vaccination coverage rates in pregnant women, people at risk, elderly and children

4. Strengthen pandemic preparedness and response capacities

5. Operational research and publications.

Dr. Nourlil stated that influenza is one of MoH priorities. Although surveillance has been established in 1995 it still needs improvement. Burden of disease still needs to be determined, communication strategy needs to be developed and vaccination coverage for risk groups should be increased.



Country objectives for the upcoming 3 years:

To extent introduction of influenza vaccination among pediatric age group and patients with diabetes.

Morocco



Dr. Jalal Nourlil, Institute Pasteur Morocco and Dr. Zahra Dahbi, Directorate of Epidemiology and Disease Control presented actions from Morocco.

Epidemiological Update: Influenza activity started in week 44 and expected to end in week 11. Both influenza A and B viruses were in circulation with Influenza A dominating. All subtyped A viruses were H3N2. B lineage was not reported.

Key Actions Achieved: Surveillance is continuing and burden of disease data is being assessed. New initiatives will be listed for 2017-2018 season to increase advocacy and vaccination coverage rates.

Country Objectives for the Upcoming 3 Years:

1. Promote influenza prevention

2. Improve influenza surveillance and disease burden data



Epidemiological Update: There is a wellestablished surveillance system and dissemination of surveillance data.

Key Actions Achieved: Influenza vaccination of health care workers is compatible with other vaccinations. All health care staff including those working at institutions and administrative positions are required to get vaccinated. HCWS are required to hold an "immunization card" that includes influenza vaccination record also. There is ongoing effort to increase vaccination coverage rates.

Pakistan



Dr. Yousuf Kamal Mirza a new member of MENA-ISN from Pakistan presenting the existing influenza situation in Pakistan.



Dr. Khawaja, a primary care physician presention on the impotance of GPs in increasing influenza awareness in Pakistan.

Epidemiological Update: There has been irregular reporting from Pakistan this season. The data indicates that only influenza A viruses were circulating with great majority being A (H3N2) and few A (H1N1) pdm09. Surveillance has been established since 2008 and both ILI and SARI cases are reported.

Key Actions Achieved: Pakistan is a new country in the MENA-ISN network. Therefore, no actions have been set forth to achieve this season.

Country objectives for the upcoming 3 years:

1. To collect retrospective data to evaluate seasonal variation pattern

2. To create awareness on international guidelines at GPs level

3. Surveillance of seasonal disease burden

4. Explore possibilities of increasing vaccination coverage rates in patients with diabetes COPD and IHD

5. Update guidelines.

Dr. Mirza emphasized on the fact that there has not been much understanding of influenza burden and benefit of vaccination in Pakistan and that a local stakeholder network would bring the forces together to increase communication to prevent a vaccine preventable disease.

Dr Nadeem Khawaja, Primary Care Physician, Lahore Pakistan also gave a talk on the role of primary care physicians on influenza awareness and vaccination coverage rates. Being the first encounters of the disease Dr. Khawaja emphasized that primary care physicians should be convinced to focus on prevention and translate research in to practice. The fact that 15000 general practitioners (GPs) operate in Lahor, workshops and seminars can be organized in collaboration with medical societies to create awareness among GPs which can greatly influenza the vaccination coverage rates.

The speakers concluded that MoH should be motivated with support from WHO to include influenza in EPI program, and training on disease burden and benefit of vaccination should be widespread for HCWs to convince them to get vaccinated themselves and to provide protection to their patients.

Tunisia



Dr. Amine Slim presented country achievements for Tunisia.

Epidemiological Update: Influenza epidemic started at week 48 started to peak in January 2017 and ended in week 12. Both A and B viruses were in circulation with 60% A (H3N2) and 40% B strains (Lineage not determined) Morbidity was about 220,000 consultants for ILI to date and 3 SARI cases reported death (none vaccinated, on 241 hospitalized cases for SARI.

There also were reports of H5N8 duck case reported in the country with no human cases.

Key Actions Achieved: Surveillance is ongoing and the laboratory is well maintained. A partnership has started with GIHSN in 2017 to determine the burden of influenza in hospitalized patients in Tunisia. Data will be published in coming years. For vaccination the budged increase was discussed however, the existing budget, enough only for 300.000 doses of vaccine was maintained but not increased. TV, radio and press is utilized in order to mobilize risk groups to get vaccinated. Discussions are ongoing with policy makers to introduce obligatory vaccination for high risk groups.



Country Objectives for the Upcoming 3 Years:

1. Maintain influenza reference lab activities for continuous data generation

2. Increase SARI Surveillance with Global Influenza Hospital Based Surveillance (GIHSN) partnership

3. Analyze burden of influenza annually which has been started in 2016

4. Prioritize influenza vaccination in the national plan to reduce antimicrobial resistance (2017-2020).

Dr. Slim mentioned partnerships with Tunisia-Germany to plan for reducing influenza burden is ongoing. He also emphasized on the fact that influenza is mistreated with antibiotics which leads to antibiotic resistance and that reducing the influenza infections will also help control the antibiotic resistance problem. Within this scope Tunisian officials have a target of reducing antibiotic use by 2020. Dr. Slim stressed the weak economic situation in Tunisia However, Dr. Slim thinks introducing obligatory influenza vaccine in high risk groups through the national program of antimicrobial resistance can help for budgeting.

Turkey



Dr. Aksakal presenting action plan for Turkey





Dr. Serhat Ünal presented the GIHSN study results on burden of influenza in Turkey.

Epidemiological Update: Influenza activity started in week 44 and expected to last until week 17. Influenza A (%75) and B viruses (25%) co-circulated with Influenza A (H3N2) domination. Of the lineage determined B viruses majority were B/ Yamagata, but B/ Victoria was also reported. In Turkey other respiratory viruses are also reported along with influenza.

Key Actions Achieved: Sentinel surveillance was expanded last year to include hospitals for SARI surveillance. Surveillance results are made available through a MoH website to public. After a special surveillance to detect mortality rates in pregnant women and assessment of the data, pregnant women have been included in prescription based funding for vaccination (reimbursement) in 2016.

To increase awareness and education level of HCPs, in collaboration with MoH, Turkish Society of Internal Medicine Specialists lead by MENA-ISN member Dr. Serhat Ünal, conducted HCP awareness activity titled "the elderly project" in 11 provinces. This project will be spread through the country with support from MoH. In order to clear the confusion caused by anti-vaccine speakers, 14 Medical Associations lead by Dr. Serhat Ünal had a press release and held a press conference about influenza disease and importance of vaccination. In addition, Dr. Nur Aksakal, MENA-ISN member is involved in a "health literacy train the trainer" program held by Gazi University in collaboration with MoH and influenza topic is added in to this training. The training is intended for family physicians and health center nurses. Influenza disease education in scientific session of pediatric congresses is another activity completed.

For advocacy MoH was iinolved in updating the "Adult Vaccination Guide" and a circular for vaccination of pregnant women and risk groups has been sent by MoH to the healthcare staff.

Country Objectives for the Upcoming 3 Years:

1. Documentation of disease burden through SARI surveillance results and GIHSN study results

2. Implementation of increasing VCR strategy in elderly

3. Preparation and implementation of a national adult vaccination program with a life-long immunization approach including: adult vaccination calendar (There is one recommended by a group of associations with the participation of MoH representatives)

4. Setting vaccination coverage rate targets for elderly and risk groups

5. Recording and follow-up of vaccinations

Dr. Aksakal stated that collaboration with all stakeholders at local level and increasing awareness of medical school students, future doctors, on public health and importance of vaccination will play an important role.

Study

A study proposal from MEN-ISN members to support vaccination of pregnant women in the region

One of the hot topics of the meeting discussions was the vaccination of pregnant women. Although in several regional countries WHO recommendation of prioritizing pregnant women for vaccination has been adopted there still remain resistance from patients and gynecologist. Gynecologist require local data for

burden and safety of the vaccines. To overcome this mistrust of the avnecologists in the region with local data, MENA-ISN members proposed to start a multicenter prospective study in the MENA region to show the safety and benefit of influenza vaccines in pregnant women.

Concluding Remarks

Each MENA-ISN meeting not only enriches the knowledge level of the members but also provides a great platform for experience sharing. It is becoming clearer that although MENA countries are closely related geographically and in some aspects culturally, the act of policy making might differ when it comes to public health policies. In some countries influenza awareness is driven by the MoH whereas in other countries MoH has left the floor to the scientists and other stakeholders to drive the awareness with only providing authorization to support. Nevertheless, WHO leadership and government support/political commitment still remain the main drivers of successful influenza vaccination programs. Libya is setting a great example of determination with rapidly increasing vaccination coverage rate despite the political distress the country has been in lately.

MENA-ISN members have stated that through the trainings they are receiving they now understand better how to translate "science" in to understandable "phrases" and turn the information in to action.

Some MENA-ISN members, Iran, Turkey, have been able to establish local Influenza Stakeholder Networks to expand the experience gained from MENA-ISN into the countries. Pakistan, Saudi Arabia and Egypt are about to establish their local network. Other countries are also in preparation.

To give an idea on how MENA-ISN members perceive the MENA-ISN initiative, below are statements from some members after the 6th Meeting in Prague:

"It was such a pleasure to finally meet everyone in person and put a pretty smile and face with your names. I met the majority of you for the first time, but I felt like I already knew you. That was such a wonderful, successful meeting. Everyone was having a blast.

I believe that the diverse and dynamic group of spea-

kers, as well as, actionable and practical tools of engagement models have worked in other countries will help us too; to become more effective in the on-going work especially with diabetic patient and influenza vaccine

I wanted to thank all of the people who were involved in putting together the meeting. We know what a huge effort it took to make the (MENA-ISN)."

From Dr. Fatima Younis, Ministry of Health, KSA

"I hope that this email finds u well and u arrived home safely. I would like to thank you very much for the effort you are doing to let such meeting so fruitful and successful.

This meeting make us more and more enthusiastic to work hard"

From Dr. Omaima Idris, Professor of Obstetrics & Gynecology, Cairo University, Egypt

"Thank you so much Meral for your continuous support and spinning power !"

From Dr. Amine Slim, National Influenza Reference Laboratory, Tunisia

"Greetings from Lahore Pakistan. Indeed it was a well arranged meeting. Listening to other countries progress is going to go a long way to devising our own plan to tackle Influenza in Pakistan."

From Dr. Muhammad Nadeem Khawaja, Pakistan