Topic: International symposium on Public Health Surveillance, Issues, and Challenges – The Road Ahead

Dated: 21 July 2022

Member Coordinators:

1. **Prof. Ananth Rao,** Emeritus Professor Finance, Dubai Business School, University of Dubai & Non-Resident Research Fellow, Mohammed Bin Rashid School of Government, Dubai, UAE
2. **Dr. B.S. Nanda Kumar**; Director, Division of Research and Patents (DRP); Associate Professor, Department of Community Medicine at Ramaiah Medical College (RMC).
3. **Shailee Shah**; Manager, Learning & People Management at Ramaiah International Center for Public Health Innovations (RICPHI).

Introduction

The symposium was organized by the Ramaiah Medical College, Bangalore, in collaboration with the Mohammed Bin Rashid School of Government, Dubai, UAE for the Public Health personnel focusing on Public Health Surveillance and its Challenges in implementation.

Speakers:

1. H.E. Dr. Eesa Mohammed Bastaki, President, University of Dubai
2. Dr. Arthur King, Professor and Director of Academic Affairs, Mohammed Bin Rashid School of Government, Dubai
3. Dr. Giridhara Babu, Professor, Indian Institute of Public Health, Public Health Foundation of India, Bangalore India
4. Dr. Arkalgud Ramaprasad, Professor Emeritus of Information and Decision Sciences, University of Illinois, Chicago, USA
5. Dr. Krishnamurthy Jayanna, Dean, Faculty for Allied Health and Life Sciences, Ramaiah University of Applied Sciences, Bangalore, India
6. Dr. Vidya Nandagopal, Director, Centre for Executive Development, University of Dubai, UAE
7. Dr. Manoj Kumar M.V., Associate Professor, Nitte Meenakshi Institute of Technology, Bangalore, India

Moderators:

1. Dr. Immanuel Moonesar, Associate Professor, Health Administration and Policy, Mohammed Bin Rashid School of Government, Dubai
2. Dr. Lalitha K., Professor and HOD, Dept. of Community Medicine, Ramaiah Medical College, Bangalore, India
3. Dr. Nayanjeet Chaudhary, Director, Ramaiah International Centre for Public Health Innovations, Bangalore, India

Resource Persons:

1. Dr. Fatma Bin Shabib, Head of Health Policy Development Section, Dubai Health Authority, UAE

2. Dr. Hend Al Awadhi, Public Health Consultant & Head of Health Promotion and Education Section, Dubai Health Authority, UAE

3. Dr. Habib Mohammed Al Ismaily, Consultant, Trauma and Orthopedic Surgery, Rashid Hospital, Dubai, UAE

4. Dr. Immanuel Moonesar, Associate Professor, Health Administration and Policy, Mohammed Bin Rashid School of Government, UAE

5. Dr. Arjun Kakrani, Professor of Clinical Eminence & Director, Academic Collaborations, Dr. D.Y. Patil Medical College, Pune, India

6. Prof. Scott McNabb, Research Professor, Global Health, Emory University, USA

7. Dr. Ramesh Bhonde, Health Scientist, Dr. D.Y. Patil Vidyapeeth, Pune, India

8. Dr. Chetan Chaudhari, Director, Global Business School and Research Centre, Dr. D.Y. Patil Vidyapeeth, Pune, India

9. Dr. G. Suman, Professor, Dept. of Community Medicine, Ramaiah Medical College, Bangalore, India

10. Dr. Ibrahim Bani, Associate Professor, Ajman University, UAE

11. Dr. Shalini C. Nooyi, Vice Principal (Academics), Ramaiah Medical College, Bangalore, India

Symposium Description:

The session began at 10:00 AM GST (Gulf Standard Time) by Shailee Shah with the Welcome note and was taken over by Dr. Nanda Kumar B S with the introductory speech regarding the technology gains in the health sector, the importance of human involvement in the surveillance systems, and most importantly the need for this public health surveillance symposium. In addition to this, the speaker H.E. Dr. Eesa Mohammed Bastaki, President, University of Dubai was introduced to the audience for his valuable remarks.

The Speaker **H.E. Dr. Eesa Mohammed Bastaki** spoke about the relationship of the UAE with India and other countries like France, which was highly established during the UAE President's visit to France where he observed the students and the frontliners (doctors) who protected the nation. Then he mentioned the two main pillars which make a country developed i.e. Education and Health. Also he addressed the magnificent relationship between India and the UAE in terms of trade, education, collaborations, etc.

He also added that Health and Education complement a balanced society, which refers to a Sustainable society. Then the speaker has given a brief about a Sustainable society, which should have 3 main elements:

A. Environment
B. Society
C. Economy

His statements also added that Human well-being and economy should be balanced for a sustainable society and nation. And he concluded his talk by giving us the main element of this symposium which is Human Capital and the development of human capital by building healthy relationships between the nations.

The Speaker H.E. Dr. Eesa Mohammed Bastaki formally inaugurated the Public Health Symposium giving his warm regards.

PLENARY SESSION I

This Initial session was continued with a plenary session by Dr. Immanuel Moonesar, Associate Professor, Health Administration and Policy, Mohammed Bin Rashid School of Government.

The session has begun with the introduction of the speaker **Dr. Arthur King**, Professor and Director of Academic Affairs, Mohammed Bin Rashid School of Government who has given us a brief about the Mohammed Bin Rashid School of Government. The school was established in 2005 to develop human capital in three ways:

A. Conducting research
B. Executive training
C. Academic Programs – Four Master's degrees
   - Master of Public Administration
   - Master of Public Health
   - Master of Innovation & Management
   - Executive Master of Public Administration (Arabic)

Dr. Arthur King's session was continued by **Dr. Immanuel Moonesar's** presentation on Issues and Challenges in Public Health Surveillance, where he has given a brief about the current state of health care and surveillance aspects, challenges faced regarding public health surveillance systems in different countries, and how that can be mitigated along with how the collaborations between countries yield positive public health systems worldwide.

He explained the importance of surveillance function at all the levels of healthcare systems and described the word 'Surveillance' as information to action which has to be reliable and timely.

ROUND TABLE CONFERENCE I

After a 10min Tea break, the third session of the symposium was continued by Dr. Lalitha K., Professor, and HOD, Dept. of Community Medicine, Ramaiah Medical College, Bangalore, India, with a Round Table Discussion. Five renowned speakers were involved in the topic '***Public Health Surveillance: Global overview and regional issues.'***

Dr. Fatma Bin Shabib described all the different surveillance systems adopted by the healthcare providers for the dissemination of data in multi-sectorial collaborations. And also gave us an overview of the management aspects of healthcare delivery systems which can support the frontliners with regard to the policies and policy building.

Dr. Hend Al Awadhi talked about the importance and requirements for establishing a proper surveillance system, where customizing and adapting to the changes is given the top priority. In addition to this, the speaker gave us an overview of Sentinel Surveillance which can identify the missing cases.

Dr. Habib Mohammed Al Ismaily briefed about the need for the integration of both proactive and reactive surveillance systems, as there can be numerous regional and global issues raised when adapting to either of the single surveillance systems. He also gave us a view of how we can strengthen our existing surveillance systems.

Dr. Immanuel Moonesar gave us an overview of the differences observed between the theoretical knowledge we possessed and the technical implementation skills we had, regarding the public health surveillance systems during the COVID crisis in the country. And with regards to the global adoption of telemedicine, he added that there was a shift/drive in the adoption of the technologies which in turn led to the implementation of telemedicine.

Dr. Arjun Kakrani spoke about the challenges in implementing the already present surveillance systems, taking the COVID crisis as the most beneficial example. Also talking about the newer implementations done such as emedicine, telemedicine, and esanjeevani for the betterment of the public and public healthcare systems during pandemics such as COVID-19. He also briefed us about the ailments and the action points in implementing the public health surveillance systems for the public and the public health persons.

PLENARY SESSION II

Following lunch, Dr. Nanda Kumar B S presented **Dr. Giridhar Babu**, Professor and Head, Life course & Epidemiology, Public Health Foundation India to take the session ahead. Dr. Babu held a session on Public Health Surveillance: Dimensions & Directions. The session was focused on Public Health surveillance from 3 dimensions: Patient flow, Data flow & implementation of responses. He explained the Goals of the Public Health Surveillance System, target outcomes, and recommendation framework for Public Health Surveillance. Data dissemination, private sector engagement, Governance among bureaucracy & general public, and other strategies like Antimicrobial Resistance Surveillance (AMR) were also included in the session.

ROUND TABLE CONFERENCE II

This Plenary session II was complimented by the Round Table Conference II which was moderated by Dr. Nayanjeet Chaudhary, Director, and Ramaiah International Centre for Public Health Innovations, Bangalore, India. Seven eminent speakers were involved in the topic *'Curricular requirements for Public Health Surveillance Courses.'*

Dr. Ibrahim Bani outlined the gaps in public health education worldwide, differentiating the workforce between various countries in means of training, particularly in public health. And addressed the disparity between public health schools.

Prof. Scott McNabb summarized the Evolution of Public Health Surveillance with the addressing of the book 'Transforming Public Health' which says there are 120 surveillance systems in the US, which clearly shows the evolution of Public Health systems. The speaker also added about the ideology of the One

Health information system, gave us a brief overview of health informatics, and addressed the gaps created in implementing the surveillance systems.

Dr. Chetan Chaudhari briefed us about the weightage that is to be given in the public health surveillance courses, which usually render 3.5-4 credits. Also mentioned about the essential digital platforms which can be used in an effective manner for a better program. And suggests that there be a 50 percent weightage for the surveillance courses.

Dr. Ramesh Bhonde summarized the need for a globally integrated surveillance system such as One Health which is a novel yet effective area for teaching surveillance. And also talked about the positive health concept which can be equally effective in addition to prevention and treatment of disease.

Dr. Kusuma Devi addressed the challenges faced in implementing the public health courses with respect to resources, trained personnel, and syllabus. The speaker also mentioned how to effectively overcome these issues faced i.e. by addressing the challenges, identifying gaps, understanding the lacunae and competencies and focusing on learning outcomes rather on cognitive skills

Dr. Shalini C Nooyi ran down the emphasis to be laid on the medical students or professionals, particularly regarding public health surveillance. And phrased the important aspect of sensitizing medical students toward public health which is the main focus of Ramaiah Medical College.

Dr. G Suman outlined the careers in the domain of public health for various health care professionals. And this public health surveillance course will definitely be an added skill in their curriculum with having a good knowledge of epidemiology. Also detailed about the undergraduate curriculum where 'pandemic' topic is added for a better understanding and review from the initial course of time.

PLENARY SESSION III

This plenary session III was taken over by **Dr. Arkalgud Ramaprasad** for the topic Pathways to Public Health Surveillance – Precepts to Practice.

The speaker enlightened the complexity of the public health surveillance systems and added that this complexity can be simplified by studying the ontology of the system. He addressed that the key issue in the surveillance system is the timing. And also talking about the ineffective/unexplored pathways, the speaker showed ways in which the ineffectiveness can be rectified or redirected.

CONCLUDING REMARKS I

This concluding session 1 was addressed by Dr. Krishnamurthy Jayanna, Dean, Faculty for Allied Health and Life Sciences, Ramaiah University of Applied Sciences, Bangalore, India.

The speaker addressed the effectiveness of the Public Health Surveillance curriculum with regards to having the epidemiological capacity, diagnostic infrastructure, and ability to administer programs effectively as the critical aspects.

CONCLUDING REMARKS II

The concluding session 2 was addressed by Dr. Vidya Nandagopal, Director, and Centre for Executive Development, University of Dubai, and UAE.

The speaker addressed the importance of the interface between technology and management for every profession, without which it would not be any easier for the professionals in their problem-solving aspects. Also added that effective training can create a common culture across nations for a globally effective health approach. The speaker also emphasized the importance of multi-sectorial pieces of training with respect to AI, ML, and many more, which can serve as beneficial for the overall applications.

CONCLUDING REMARKS III

The conclusion of session 3 was addressed by Dr. Manoj Kumar M.V., Associate Professor, Nitte Meenakshi Institute of Technology, Bangalore, India.

The speaker gave us a brief on the importance of AI, ML DL, VDNN, NN, and ANN and the data growth opportunities for the better development of the Public Health Surveillance curriculum. He gave us an overview of the significance of data analytics in the public health sector. He finally summarized the differences in last, current and next decades in adapting to the data growth opportunities.

VOTE OF THANKS

The vote of Thanks was given by Prof. Ananth Rao, Emeritus Professor of Finance, Dubai Business School, University of Dubai & Non-Resident Research Fellow, Mohammed Bin Rashid School of Government, Dubai, and UAE.

The speaker conveyed his appreciation towards each and every participant in the Public Health Symposium for their deliberate participation. He also mentioned various outcomes of the symposium held for various health and non-health members.

The Speaker Prof. Ananth Rao, finally concluded the session not forgetting to thank each and every person responsible for conducting this valuable symposium.

For interested persons, each session's detailed AV coverage is available on www.publichealth-symposium.com under each agenda.