

EDİTÖRE MEKTUP / LETTER TO THE EDITOR

Influenza pandemic preparedness: gains made and the challenges remaining

Grip salgınına hazırlık: kazanılan başarılar ve kalan zorluklar

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To the Editor,

Influenza has been regarded as one of the major global public health concerns owing to the high caseload, high case fatality rate, an ability to spread across the globe in a short duration of time and the immense burden the disease casts on the health system¹. The available recent estimates depict that in excess of 1 billion cases are reported each year, of which close to 0.5 million people succumb to the disease-related complications². It is indeed an alarming cause of concern as the disease is preventable and its transmission can be easily interrupted through the implementation of standard prevention and control measures¹.

Over the years, due to the sustained efforts and the political commitment, significant gains have been made in the field of prevention, control, preparedness and treatment of the disease¹⁻³. The global influenza surveillance and response system has been strengthened and more than 110 nations are well-equipped with the same to monitor the evolution of virus and initiate a global alert mechanism^{1,2}. In addition, significant improvement also in the field of virological surveillance and superior diagnostic methods (viz. FluNet) has been adopted to aid in the early detection of the infection². On a similar note, steps have been taken to ameliorate the epidemiological surveillance and monitoring of the disease through adoption of a comprehensive operational definition of the case and creation of a web platform to periodically

document the cases to ascertain the trends of the disease and the caseload^{2,3}.

Further, in order to ensure that the information pertaining to the virus with human pandemic potential is readily shared with all the stakeholders, a framework for the preparedness to respond to a pandemic has been established since 2011². Under the framework, standard vaccines, drugs and diagnostics have been shared with different nations to strengthen global pandemic preparedness^{1,2}. Apart from that, measures have been taken to strengthen the international health regulations and an expert group has been created to formulate the recommendations for immunization, especially in vulnerable population groups2. In addition, measures have been taken to minimize the shortage of vaccine and ensure equitable access to the same through the development of a global plan^{1,2}. Finally, steps have been also taken to improvise and explore the various dimensions of research to constantly make advancement in the field of prevention, control and preparedness3.

Despite all the above strategies, the global leaders have not been successful to control the disease and this is because of the numerous challenges which still exists and are undermining the progress³⁻⁵. These include deficient capacity to undertake epidemiological and virological surveillance owing to which the nations have failed to identify the pandemic potential virus, which is a crucial element for the strengthening of the international health

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regulations^{2,4}. Also, due to the lacunae in the surveillance, the precise estimates for the disease are not available and as a result, the disease has not become the priority for the national leaders, especially in low & middle income nations^{4,5}. Moreover, most of the nations have either no preparedness plan or plan which only exists on paper with no national capacity / technical expertise to implement the same^{1,5}.

In addition, nations are also struggling in the area of community mitigation strategies, and thus the general population awareness about the first line of defense to the disease or its transmission is minimal². This plays a major role in the fact that the stakeholders are still not able to control the disease2. Finally, the list of challenges cannot be complete without mentioning the issues with the vaccines, wherein wither their potency / effectiveness or accessibility or readily availability (poorly planned immunization campaigns) is questionable in most of the settings due to poor inventory control³⁻⁵. Also, the research pertaining to having more effective drugs to deal with the infection is also not much there1. Keeping all these facts in mind, it is high time to address all these challenges and implement measures to bridge the existing lacunae¹⁻³.

In conclusion, significant gains have been made in the field of prevention, control and preparedness to respond to the disease pandemic, nevertheless a lot of challenges still exist and they have to be addressed to mount a systematic and wellcoordinated public health response to the deadly disease.

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REFERENCES

- World Health Organization. Influenza (Seasonal) Fact sheets; 2018. https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal) (accessed Mar 2019).
- World Health Organization. Global influenza strategy 2019-2030. Geneva: WHO press; 2019;1-25.
- Liu L, Haynie A, Jin S, Zangeneh A, Bakota E, Hornstein BD, et al. Influenza A (H3) outbreak at a Hurricane Harvey Megashelter in Harris County, Texas: Successes and challenges in disease identification and control measure implementation. Disaster Med Public Health Prep. 2019;13:97-101.
- Pu Z, Luo T, Yang J, Shen X, Irwin DM, Liao M, et al. Rapid evolving H7N9 avian influenza A viruses pose new challenge. J Infect. 2019;78:249-59.
- Treanor J. Influenza challenge and the challenge of drug development. J Infect Dis. 2019;219:171-2.