

Editorial

An update on preventive measures of COVID-19 in Pakistan

Amber Arshad¹, Prof Dr Saira Afzal²

¹Department of Community Medicine King Edward Medical University; ²Dean of Public Health and Preventive Medicine King Edward Medical University

Introduction

Throughout the human history, multiple disease outbreaks have affected millions of people around the globe. Such pandemics with high morbidity and mortality rates affected the countries in the worst possible ways.¹ The first deadly virus pandemic was reported in 1918 known as Spanish flu involving H1N1 influenza virus affecting 500 million people around the globe and death toll raised from 17 million to 50 million. In 2009 the world again faced another H1N1 Swine flu pandemic during 2009-2010 with 6.8 billion people under effect and almost 5 million deaths.

Similarly world is facing another problem of COVID-19 since December 2019. It started as an epidemic in the city of Wuhan, China and considered as the one of the greatest threat to the human health and health economics. The virus has crossed multiple geographical boundaries and declared pandemic by World Health Organization, affecting almost every country in the world. There is a need to take urgent and forceful actions to change the course of the disease. The countries like China, Japan, South Korea, Iraq, and other European countries^{2,3} have demonstrated that the virus can be suppressed and controlled. But this picture has another side. COVID-19 is just like any other flu disease. The mortality rate is still low and if every country steps up its preventive strategies and implement the action plans to control the disease, soon this pandemic will be over. World Health Organization calling COVID-19 a pandemic is not a huge surprise as more than 100 countries are involved and its spread is multiplied on daily basis.

However, it is a preventable contagious disease. Due to exaggeration by the media, panic among the public and myths about the disease has affected economic status of many countries.

Pakistan's southern Sindh province is the worst-affected with the virus and 15 people have been tested positive till February 2020. Most countries are using 'Containment strategies'. Pakistan has also increased health screening on airports and borders. As cases are being reported on daily basis, Pakistan Government needs to step up the game and design proper control strategies for COVID. More work should be done on Pandemic preparedness, outbreak detection and response. Proper allocation of Resources must be done to control the current situation. WHO has warned countries to get ready for the accelerated phase during which rapid increase in the COVID-19 cases will occur. In Pakistan, significant steps have been taken for surveillance, social distancing, isolation and quarantine and every effort has been made by public health and preventive medicine experts for early diagnosis and prompt treatment.

The best way to prevent the infection is to avoid contact with those who have the disease and follow the guidelines given by the authorities like World Health Organization. Primary prevention includes general preventive measures. Hand hygiene is most important preventive measure. The most important change in behaviors include washing hands with soap and water for at least 20 seconds or use alcohol based hand sanitizer frequently. Other preventive steps include avoid touching eyes, nose and mouth with unwashed hands. Avoid close contact with people

especially with symptoms of coughing, sneezing and fever. Third is to practice respiratory hygiene which includes, covering mouth and nose while coughing and sneezing. Always discard the tissue paper and wash hands immediately. Fourth is to seek medical care as early as possible in case of fever, cough and difficulty breathing. One should not hesitate in sharing the previous travel history and contact history with the health care provider. Food hygiene is also very important in this situation. Consumption of raw or under cooked meat should be highly discouraged. Also avoid direct unprotected contact with the live animals in the market places. Avoid large gatherings and immediately postpone or cancel non-essential large events and gatherings.

People travelling from high risk areas must be screened at the airports at both entry and exit by taking detailed history of personal contact with sick people and measurement of temperature (using thermal guns). Despite this, some cases of COVID-19 would be missed. Especially those who are asymptomatic during the incubation period (may exceed 10 days). Travelers coming from affected areas are advised to self monitor for symptoms for 14 days. Some countries require returning travelers to enter quarantine following the local protocols.

Currently no vaccine is available for COVID-19. It is still under process and may take up to 12 months before a vaccine is available.

Secondary prevention for preventing the COVID-19 transmission includes early detection of new cases. All suspected and confirmed cases must be immediately isolated, and implement recommended preventive and control measures. All the suspected and confirmed cases must be reported to the local authorities.

Hospital protocols for diagnosis of COVID-19 starts with the thorough examination of the patient for symptoms to see he really needs to be tested in the first place. Depending on the symptoms the doctor will decide to test the patient. Next an extensive travel history is demanded. If the patient is symptom free, he is good to leave the hospital. But in case of patients showing symptoms (coughing, sneezing, fever, and chest discomfort) a throat or nasal swab is taken and sent to the lab. Suspected cases must stay in quarantine for at least 14 days. If at home then they should

limit their shared spaces. Patient with severe acute respiratory infection must be hospitalized.⁴

Currently no treatment is available for COVID-19 however, Chloroquin and Remdesivir and some other novel antiviral drugs have shown promising results in clinical trials. Remdesivir is a novel drug in the class of nucleotide analogs. Anti viral drugs used to treat other types of viruses are being used but their efficacy is not known. Only symptomatic treatment is given to the infected patients.

This is a high time that government and policy makers take right steps in right direction. Public health experts shall be involved in policy making and preventive measures against Corona Virus Disease. Preventive Medicine Departments shall be established in every medical institution to provide trained human resource and to create awareness about public health emergency situations and avoiding public gatherings. In healthcare facilities, triage and data collection shall be assured. The focus shall be on prevention rather than cure and every effort shall be made for health education and prevention. Dispelling myths, avoiding harmful practices and decreasing panic and anxiety among the public is need of the hour. Every citizen must play his role as responsible citizen and act according the advice of experts in preventive medicine.

Reference

1. Assiri A, Al-Tawfiq JA, Al-Rabeeh AA, Al-Rabiah FA, Al-Hajjar S, Al-Barrak A, Flemban H, Al-Nassir WN, Balkhy HH, Al-Hakeem RF, Makhdoom HQ. Epidemiological, demographic, and clinical characteristics of 47 cases of Middle East respiratory syndrome coronavirus disease from Saudi Arabia: a descriptive study. *The Lancet infectious diseases*. 2013 Sep 1;13(9):752-61.
2. Guan WJ, Ni ZY, Hu Y, Liang WH, Ou CQ, He JX, Liu L, Shan H, Lei CL, Hui DS, Du B. Clinical characteristics of coronavirus disease 2019 in China. *New England Journal of Medicine*. 2020
3. Lai CC, Shih TP, Ko WC, Tang HJ, Hsueh PR. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and corona virus disease-2019 (COVID-19): the epidemic and the challenges. *International journal of antimicrobial agents*. 2020 Feb 17:105924.
4. Thienemann F, MScIH DT, Pinto F, Grobbee DE, Boehm M, Bazargani N, Ge J, Sliwa K. World Heart Federation Briefing on Prevention: Coronavirus Disease 2019 (COVID-19) in low-income countries. *World*. 2020 Mar 5:15-30.