

Coronavirus Outbreak in Neighboring Countries Alerted Pakistan for Medical Preparedness and Public Health Education

Atta Ur Rehman^{1*}, Ume Hani² and Muhamamd Mujeeb Khan³

¹Margalla Institute of Health sciences, Pakistan

²Department of Infectious diseases, Rawalpindi Medical University, Pakistan

³Head of Department of Infectious diseases, Rawalpindi Medical University, Pakistan

*Corresponding author: Atta Ur Rehman, Assistant Professor, Margalla Institute of Health Sciences, Rawalpindi, Pakistan

Received: 📅 March 06, 2020

Published: 📅 March 13, 2020

Abstract

Coronavirus was first time isolated from a human being in 1965. The symptoms may include fever, cough, headache, sore throat, shortness of breath, rapid heartbeat, pneumonia and kidney failure. There is currently no preventive vaccine and treatment options are only supportive. The risk factors related to the spread of 2019CoV in Pakistan include the visiting population of infected countries. Movement of people through air travel and road transportation already bring infection in Pakistan. Ministry of National Health Services Regulations and Coordination, Pakistan is taking immediate measures at the national and provincial level like training of health care professionals, adequate supplies of equipment, establishment of isolation units and health information desks at the entry ports in collaboration with World Health organization. The effective cooperation between all the stakeholders is essential to safeguard Pakistan from 2019CoV. The research should be initiated in educational institutions pertaining to 2019CoV investigations in Pakistan

Keywords: Corona Virus; Vaccine; Risk Factors; Research; Pakistan

Short Communication

Coronavirus was first time isolated from a human being in 1965(HCoV-229E) [1]. The family Corona viridae contains Coronaviruses that are the microbial source of infections in humans and animals. The spectrum of activity of coronaviruses in humans is linked with common cold, Severe acute respiratory syndrome (SARS) and Middle east respiratory syndrome (MARS) [2]. Endemic coronaviruses morbidity of respiratory infections was 15–30% in last decade. Most vulnerable groups infected by coronaviruses include neonates, immune compromised patients and the elderly [3]. Symptoms of 2019-CoV may appear within two to fourteen days after viral exposure. The symptoms may include fever, cough, headache, sore throat, shortness of breath, rapid heartbeat, pneumonia and kidney failure. Treatment options are only supportive as no targeted anti-viral therapeutics are available at

present. There is currently no preventive vaccine for coronaviruses [4].

The outbreak of an unknown cause pneumonia was observed in December, 2019 in Wuhan, China. A novel coronavirus (2019CoV) had been isolated from patients in Wuhan by Chinese researchers in January 2020. This outbreak and isolation of Corona virus developed an attention globally including Pakistan [5]. The World health organization reported 3386 deaths and 98,429 confirmed cases of 2019CoV till 10th of March 2020 in 109 countries. Disease related mortality is higher in China followed by Italy and Iran [6]. The risk factors related to the spread of 2019CoV in Pakistan include the visiting population of neighboring infected countries. Pakistan confirmed first two diagnosed cases with 2019CoV on 26th February 2020 [6]. Movement of people through air travel and road transportation from Iran already infected people of Pakistan.

World Health Organization declared 2019CoV outbreak as a global emergency in January 2020. There is no causality caused by 2019CoV so far in Pakistan although seven confirmed cases are being reported in hospitals. Medical preparedness and community education are the most valued preventive tools. Ministry of National Health Services Regulations and Coordination, Pakistan is taking immediate measures at the national and provincial level like training of health care professionals regarding high risk patient handling, adequate supplies of personal protective equipment, establishment of isolation units for patients, establishment of health information desks at the entry ports in collaboration with World Health organization [7].

National institute of health Islamabad should train hospital staff to develop biosafety level laboratories for detection and confirmation of novel Coronavirus cases by rapid diagnostic testing in the country. Timely and regular Public Health Surveillance System activities will provide relevant data that is needed for preventive measures implementation in a area. Every hospital should establish isolation units. Standard operating procedures for personal protection of hospital staff and treatment guidelines must be displayed in important places at hospital for prompt action at the arrival of suspected cases. Public awareness campaign at media regarding preventive and emergency measures will provide health literacy to the general public. Community awareness programs

should focus on center for disease control USA and local guidelines for prevention of virus in the society. Protective measures adopted should include frequent hand washing, use of face mask, avoid close contact with sick people, stay home when you are sick and avoiding get-togethers. The effective and close cooperation between the World Health Organization, government institutes, hospitals, health care professionals and media are essential to safeguard Pakistan from 2019CoV. The research should be initiated in educational institutions pertaining to 2019CoV investigations in Pakistan.

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DOI: [10.32474/JCCM.2020.01.000125](https://doi.org/10.32474/JCCM.2020.01.000125)



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