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Original Article

Death caused by covid-19 in top ten countries in Asia affected by covid-19 pandemic with special reference to Pakistan

Morte causada por covid-19 nos dez principais países da Ásia afetados pela pandemia de covid-19, com referência especial ao Paquistão

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Abstract

The COVID-19 is a contagious viral disease, was first emerged in Wuhan, China in December 2019 and became the whole world on alert. The mortality rate in top most countries in Asia with special reference to Pakistan has been focused. Since February 26 to September 2020 the total confirmed cases and mortality rate was measured through Wikipedia and the notable journals. Iran is the only country having highest number of deaths (5.73%) followed by Indonesia (3.77%) while Saudi Arabia shows the lowest number of deaths as 1.39%. In Pakistan the first case was confirmed in 26th February, 2020. The nCov-19 has closely related to severe acute respiratory syndrome (SARS) hence SARS COV-2 was named. This virus is responsible for more than 33.9 million deaths in over all the world as of 20th September, 2020. The number of new cases is increasing time to time. Sindh province of Pakistan has reported the highest number of cases till September, 20, 2020 as compared to other parts of the country and has the highest number of death followed by Khyber Pakhtunkhwa. Because of the person to person contact the disease is spreading rapidly. The individuals who has already infected with other diseases like cancer or diabetic etc. are vulnerable. The nCOV-19 is the most contagious due to its mode of transmission. There is still no vaccine is available for the treatment of disease caused by nCoV-2019. It is therefore the only option to control this pandemic is to adopt effective preventive measures.

Keywords: COVID-19, pandemic, SARS-2, outbreak, zoonosis.

Resumo

A covid-19 é uma doença viral contagiosa, que surgiu pela primeira vez em Wuhan, China, em dezembro de 2019, e deixou o mundo todo em alerta. A taxa de mortalidade na maioria dos principais países da Ásia, com referência especial ao Paquistão, foi enfocada. De 26 de fevereiro a setembro de 2020, o total de casos confirmados e a taxa de mortalidade foram medidos por meio da Wikipedia e de periódicos notáveis. O Irã é o único país com maior número de mortes (5,73%), seguido pela Indonésia (3,77%), enquanto a Arábia Saudita mostra o menor número de mortes, 1,39%. No Paquistão, o primeiro caso foi confirmado em 26 de fevereiro de 2020. O nCov-19 está intimamente relacionado à síndrome respiratória aguda grave (SARS), daí o nome SARS COV-2. Esse vírus é responsável por mais de 33,9 milhões de mortes em todo o mundo em 20 de setembro de 2020. O número de novos casos está aumentando de tempos em tempos. A província de Sindh, no Paquistão, registrou o maior número de casos até 20 de setembro de 2020, em comparação com outras partes do país, e tem o maior número de mortes, seguida por Khyber Pakhtunkhwa. Por causa do contato pessoa a pessoa, a doença está se espalhando rapidamente. Indivíduos que já foram diagnosticados com outras doenças, como câncer ou diabetes, etc. são mais vulneráveis. O nCOV-19 é o mais contagioso devido ao seu modo de transmissão. Ainda não há vacina disponível para o tratamento da doença causada pelo nCoV-2019. Portanto, a única opção para controlar essa pandemia é a adoção de medidas preventivas eficazes.

Palavras-chave: COVID-19, pandemia, SARS-2, surto, zoonose.

1. Introduction

The government of China reported nCOV-19 as a causative agent of the infection in lower respiratory tract for the first time which was named as novel coronavirus pneumonia (NCP). The WHO recommended

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it as COVID-19 however after a successful trial by the International Committee on Taxonomy of Viruses, it was renamed as SARS-CoV-2 (Yuen et al., 2020).

This virus is highly contagious and causes the disease with symptoms like fever, dry cough, fatigue, myalgia, and dyspnea (Chen et al., 2020). The COVID-19 pandemic spreaded very rapidly and by October 1st, 2020, the virus had spread all over the world, resulting 33.9 million cases and 1.01 million deaths (Lau et al., 2021). Due to the high rate of transmission, on January 30, 2020 the WHO declared it is a public health emergency in global concern and communicated to all the countries to come out for the battle against the disease (WHO, 2020).

Person to person transmission of SARS-CoV-2 was first evidenced by scientists from Hong Kong University and was comprised in the following stages: this disease can spread upto 83% of the population; the clinical manifestations was from mild to moderate; asymptomatic virus shedding raises the possibility for transmission from asymptomatic carriers to others and the presentation of diarrhea suggests the possibility for gastrointestinal involvement and fecal–oral transmission. This study is more helpful for the control and management of COVID-19 (Chan et al., 2020).

Karachi, a capital city in Sindh Province Pakistan hit by the COVID-19 epidemic in 26th February, 2020 for the first time. Some protective measures were adopted to control the COVID-19 transmission in Sindh and other provinces of Pakistan, including the suspension of public transportation, the closing of public places, families' management at home, isolation, care for infected people and monitoring suspected cases. Until the Mid of March, government of Pakistan locked down the whole country and imposed to stay at home to avoid contacting with others. The battle against COVID-19 is now at its end in Pakistan and the rest of the world while China has overcome.

Studies on nCoV-19 (SARS-CoV-2) have been published in the past few weeks to report on clinical characteristics (Wang et al., 2020), genome sequencing (Lu et al., 2020), possible intermediate host (Lam et al., 2020), the evolutionary reservoir (Zhou et al., 2020). It is the time to educate the people on transmission pattern, risk factors and management of COVID-19. To facilitate outbreak management of COVID-19 in Pakistan, there is an urgent need to understand the public awareness of COVID-19 at this critical moment. Current study addresses the ongoing situation of COVID-19 during the rapid rise period outbreak in Pakistan.

2. Study Design

The most interesting articles have been published on different aspects of nCOVID-19 in various reputed journals internationally. Present study was mapped in the helpline of the related review of literature. For the collection of the information, most of the data was collected via published articles. The Wikipedia, the free encyclopedia was searched for 2020 COVID-19 pandemic in Pakistan on regular intervals. Excel graphs were designed for the presentation of the data. In calculating the percent prevalence of the cases, the number of cases reported, number of deaths, number of recovered cases and the number of active cases were multiplied by 100 and divided by total number of laboratory confirmed cases.

3. Results

Table 1 demonstrates the pattern of infection caused by COVID-19 outbreak pandemic in Pakistan since 26th February to 20th September. A total of 301481 cases were reported including 131880 Sindh, 97679 Punjab, 36942 KPK, 15901 Islamabad, 3196 G.Biltistan, 13483 Baluchistan and 2400 Azad Kashmir respectively. In terms of actives cases 1.88% (n=5673) were reported overall including 10.4%(n=333)

G.Biltistan followed by 7.43%(n=1002) Baluchistan, 5.12%(n=123) Azad Kashmir, 2.49%(n=396) Islamabad, 2.14%(n=791) KPK, 1.53%(n=2019) Sindh, 1.03%(n=1009) respectively. in current study 96%(n=289429) lives have been recovered including 96.9%(n=94453) in Punjab, 96.6%(n=127418) Sindh, 96.3%(n=15327) Islamabad, 94.4%(n=34894) KPK, 92.1%(n=2212) Azad Kashmir,91.4%(n=12336) Baluchistan, 87.2%(n=2789) G-Biltistan. Regarding deaths 2.11%(n=6379) including 3.40%(1257) KPK, 2.70%(=65) Azad Kashmir, 2.31%(n=74) G.Biltistan, 2.26%(n=2217) Punjab, 1.85%(n=2443) Sindh, 1.11%(n=178) Islamabad and 1.07%(145) Baluchistan were reported.

Iran is the only country In Asia having the highest number of deaths (5.73%) followed by Indonesia (3.77%) while Saudi Arabia showed the lowest number of deaths 1.39% (Table 2).

Table 1. Pattern of infection caused by COVID-19 outbreak pandemic in Pakistan (26th February to 20th September, 2020).

Pattern of cases	Provinces/Territories							
	AJK N(%)	Baluchistan	Gilgit Baltsitan	Islamabad	KPK	Punjab	Sindh	Total
Total cases	2400	13483	3196	15901	36942	97679	131880	301481
Active cases	123 (5.12)	1002(7.43)	333(10.4)	396(2.49)	791(2.14)	1009(1.03)	2019(1.53)	5673(1.88)
Recoveries	2212 (92.1)	12336(91.4)	2789(87.2)	15327(96.3)	34894 (94.4)	94453(96.9)	127418(96.6)	289429(96.0)
Deaths	65 (2.70)	145(1.07)	74(2.31)	178(1.11)	1257(3.40)	2217(2.26)	2443(1.85)	6379(2.11)

Table 2. Top 10 countries in Asia affected by COVID-19 pandemic.

S.No.	Country	Cases	Death	Percent prevalence
1)	India	5,992,532	94,503	1.57
2)	Russia	1,146,273	20,239	1.76
3)	Iran	443,086	25,394	5.73
4)	Bangladesh	359,148	5,161	1.43
5)	Iraq	345,969	8,935	2.58
6)	Saudi Arabia	332 790	4655	1.39
7)	Turkey	312966	4655	1.48
8)	Pakistan	310275	6457	2.08
9)	Philippines	304226	5344	1.75
10)	Indonesia	275213	10386	3.77

4. Discussion

The outbreak of the novel coronavirus disease, (nCOVID-19) formally designated as severe acute respiratory syndrome-related coronavirus SARS-CoV-2. This disease represents a pandemic threat to global public health (Gorbalenya et al., 2020; Kupferschmidt and Cohen, 2020). The outbreak initiated from Wuhan, China and spreaded to all over the world resulting 33.9 million laboratory confirmed cases and 1.01 million deaths (Coronavirus Update (Lau et al., 2021) as of September, 20, 2020. In the month of September the highest cases 133947 were reported in Sindh followed by Punjab 98428, KPK, 37357, Isalamabad 15649, Baluchistan 12879, G.Biltistan 2903, Azad Kashmir 2299.

At present, a total of 306,304 cases were reported in Pakistan including Sindh province of Pakistan is on the top to record 133947 laboratory confirmed cases and Punjab with 98428 on second number while the least number of cases were recorded in Azad Kashmir 2299. Furthermore, millions of people's lives have been affected as a result of mandatory isolations/ quarantines. The current effect of the COVID-19 outbreak could potentially bring major challenges to health system of the world and may affect the global economy if the spread was not effectively controlled (Gorbalenya et al., 2020; Kupferschmidt and Cohen, 2020).

The outbreak of COVID-19 has drawn major global attention. Scientists and physicians in the world are attempting to understand this new emergent disease, its epidemiology, making the efforts to expose possible treatment, discover effective therapeutic agents, and to develop vaccines.

According to Rothan and Byrareddy (2020), the recovery period of COVID-19 infection is 6-14 days. In China, about 80% of deaths were in over 60 years in age, and 75% comorbidities including cardiovascular diseases and diabetes (WHO, 2020).

It is important to note that the real number of people infected due to mild or asymptomatic condition are still unknown. A recent modelling estimated the population attack rate to be between 0.75 per 100,000 to 15.8 per 100,000 analysing rates down to prefecture level in China (Yang et al., 2020). Any determination of incidence may likely to be an underestimate, since it will not include mild and asymptomatic cases. Accuracy of such estimates may depend on the development of sensitive and specific serologic tests.

Disease controlling professionals, practicing physicians and scientists are disconnected in the fight against SARS-CoV-2 and COVID-19. In addition, important decisions were not made by experts in the field. Hopefully, these issues may be dealt with swiftly and decisively during and after the outbreak. There are two possibilities that this outbreak may unfold, If SARS-CoV-2 is not eliminated from humans through quarantine and other measures, it can still be eradicated by vaccination. If it attenuates to become another community-acquired human coronavirus causing mild respiratory tract disease resembling the other four human coronaviruses associated with common cold, it will not be a disaster either. Before SARS-CoV-2 attenuates further to a much less virulent form, early diagnosis and improved treatment of severe cases hold the key to reduce mortality. We should remain on one page against this. Redoubling our research efforts on SARS-CoV-2 and COVID-19 will solidify the scientific basis on which important decisions are made.

Crucially, doctors and researchers around the world are tackling the problem with urgency, Henao Restrepo says. "This is a crisis like no other and we will have to work together," she says. "That is the only way perhaps we are going to find a solution (Kupferschmidt and Cohen, 2020).

This is a time that we would have to follow advice from the government, the WHO and the scientific community. Ensuring the health safety and wellbeing are important steps for the society and this is only possible to ensure the call "stay home and save the nation" should reached to each individual in the globe.

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