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Review Article

Similarities & Correspondences of novel coronavirus (CoV), SARS and MERS in KSA

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ABSTRACT

Objectives: There is an existing outbreak of a Novel coronavirus (CoV), pandemics, which discovered from Wuhan in China and has now spread to more countries Accordingly, to provide an impression of the major deadly three coronaviruses and recognize areas for improvement of future action plans preparedness, as well as provide risk assessment plan for stopping their spread and implementing learned lessons from the coronavirus outbreaks.

Materials and Methods: Transparency, Preparedness, and sharing of information are crucial to risk assessments by Utilizing an inclusive review of literature, Comparisons between the information obtained regarding clinical signs, treatment and diagnosis, spread, prevention measures and risk factors for (MERS) (SARS) and (CoV) were made.

Results: Insufficient risk assessment concerning the urgency of the situation, led to the fast spread of (CoV) throughout China. (CoV) has spread more quickly compared with SARS and MERS. Due to its worldwide spread.

Conclusions: The new study accomplished that we cannot learn a lot from the two previous epidemics of corona infection and were ill-prepared to deal with the (CoV) pandemic. Upcoming studies should challenge to report the uses and implications of internet of technologies for tracking the spread of infection.

1. Introduction

On December 2019, Wuhan city Commission of Health reported seven of 27 viral pneumonia affected cases being critically ill. Furthermost patients had history of exposure to wildlife animals at sale Market in Wuhan, where snake, poultry, bats, and other farm animals were also sold.

This was identified to be caused by a new type of coronavirus, tentatively named (CoV); Coronaviruses are large single stranded positive-sense RNA genome and enveloped viruses. They can infect humans, as well as a diversity of animals, such as mice, birds, bats, dogs and pigs, causing mainly respiratory and enteric diseases. The epidemic is escalating rapidly. The virus was detected from respiratory fluid samples and identified as beta corona virus, placing it alongside other (SARS) Severe Acute Respiratory Syndrome and (MERS) Middle East Respiratory Syndrome.[1] CoV is one of the family of corona- viruses that infect humans, after MERS- beta group of coronavirus and SARS- corona virus, CoV genetic sequence became available to the WHO, which allowed laboratories to produce (RT-PCR) diagnostic Reverse-transcription polymerase chain reaction for detection of viral single positive sense RNA. CoV is a beta corona virus (β CoV) with over 70% similarity in genetic sequence to SARS-corona virus.[2] Above 25 countries have discovered cases to date, including countries from North America,

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Europe, Asia, and the Middle East (Figure 1).[3] In February 2020 The World Health Organization (WHO) declared COV a Public Health of crisis of International Concern. The virus spread rapidly from a distinct city to a whole country in only 30 days.[4] the numbers of infected cases and deaths have exceeded the peal from the SARS outbreak in 2002-2003.[5] The lack of transparency of the Chinese ministry of health has been mentioned as one of the contributors to the spread of the virus worldwide.[6] China declared 774 deaths; Open markets may be are the focal of transmission from host to human, much like the outbreak of COV ongoing.[7] The SARS outbreak was confined in July 2003 and since 2004 there have not been any known cases of SARS reported.[8] The second coronavirus resulting in a major world public health crisis after the occurrence of SARS was the MERS. The MERS-CoV was associated with a strain of (SARS-CoV) that caused an outbreak in 2002–2003 in 29 countries. This outbreak was detected by 8273 infected cases and 775 deaths, with the majority of cases in Hong Kong.[9] The ongoing episode of the coronavirus sickness 2019 (COVID-19) as named by the World Health Organization has a large number of affirmed cases the world over and has asserted countless lives. The infection was named SARS-CoV-2 in February by the International Committee on Taxonomy of Viruses. COVID-19 presents as fever, dry cough, dyspnea, cerebral pain, and pneumonia. In a little subset of serious cases, the illness rapidly advances to respiratory disappointment and even death. Since the 21st century, there have been three significant episodes brought about by human coronaviruses, including the extreme intense respiratory disorder (SARS) that broke out in 2003, the Middle East respiratory condition (MERS) in 2012, and the ongoing pandemic of COVID-19. Since 2003, critical advancement has been made in the investigation of SARS-CoV and MERS-CoV concerning their common starting points, pathogenesis, antiviral turn of events, and antibody plan. Since SARS-CoV-2 and SARS-CoV are firmly related, past discoveries on SARS-CoV are exceptionally applicable to a superior understanding just as determination, treatment, avoidance, and control of SARS-CoV-2. In this survey, we feature ongoing advances in the field; look at the natural attributes of SARS-CoV and SARS-CoV-2; sum up the critically required analytic, treatment, anticipation and control choices; and give future points of view to the result of the episode and research inquiries to be replied, remembering a portion of the challenges for immunization improvement. The first emerged cases in Saudi Arabia in 2012 when a 60 year- old man existing with severe pneumonia.[10] As the direct contact with the saliva of infected camels, or consumption of contaminated milk or meat was the suspected transmission route for human MERS-COV infection. After two years the outbreak of the virus did not occur again, in 2014 a total of 662 discovered cases and 32.97% mortality rate.[11] 1364 cases were observed in 2016 in Saudi Arabia. 27 countries were affected by MERS during the outbreaks. Identified Cases outside of the Asia, including the pandemic 186 individuals in South Korea were infected as a result of a spreader, were individuals that had previously been infected in the Middle East.[12] 2494 definite laboratory cases of MERS have been reported, and 858 deaths have occurred (34.4% case-fatality ratio).[11,13]

The current study is designed to provide an overview of the deadly three coronaviruses for improvement of future plans, as well as provide risk assessment and actionable items for discontinuing their spread, employing the important learned lessons from the outbreaks of the two deadly coronavirus detected previously, The initial reports from the current COV pandemic in China Wuhan city. Although the pandemic is still ongoing, initial lessons from its spread can help inform public health officials and health care providers to fight its development COV.

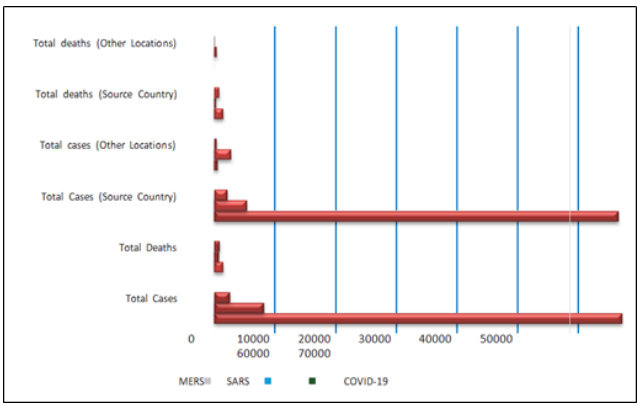

Fig. 1: Relationships between coronaviruses overall and by country, MERS (Middle East Respiratory Syndrome), Saudi Arabia; SARS (Severe Acute Respiratory Syndrome), Hong Kong (China); and novel coronavirus , China.[2]

2. Materials and Methods

Comprehensive review and the CDC website(Centers for Disease Control and Prevention) had been used, The obtained material regarding clinical symptoms, transmission methods, treatment, diagnosis, preventive measures and risk factors for novel COV, MERS and SARS. Additionally, Access to the Chinese Center for Disease Control and Prevention (CCDC) for obtaining up-to-date maps and graphs to compare the longitudinal distribution of the three outbreaks coronaviruses.

3. Results

With respect to novel corona virus infections diagnosis was conducted primarily by assessing clinical symptoms of the presenting patient, chest imaging and the ruling out of viral and bacterial causative agents of pneumonia.

Once common pathogens were ruled out, upper and lower respiratory tract specimens were obtained for cell culture and Genetic material sequencing analysis. These specimens indicated a Covid-19.[3] Using real-time reverse transcription PCR (RT-PCR) assay, was used to detect viral RNA by targeting a consensus RNA dependent RNA of b- Covid-19.[3] A diagnostic test was developed soon after viral isolation. Prophylactic antibiotics treatment was used to prevent secondary infection. Up to now, no antiviral agent has been proven effective against COVID-19. Preliminary reports showed that oseltamivir was given to patients (orally ad- ministered 75 mg 2x/day) in combination with antibiotics.[14] Corticosteroids (40–120 mg/day) were given to Patients suffering from severe illness (22%) to reduce lung inflammation. Since the combination of ritonavir and lopinavir was already presented in the local hospital, a randomized controlled trial was developed quickly to evaluate the efficacy and safety of combined use of ritonavir and lopinavir patients hospitalized with COVID-19.[14] According to the WHO affected case is demarcated as a patient with severe acute respiratory signs and with no other cause that fully explains the clinical symptoms at least one of the following: a past travel to or residence in the Wuhan city, China in the 14 days prior to symptom start.[15] Case confirmed was a person COVID-19 infection. On February 13 2020, National Health Commission in Hubei said that all confirmed cases by clinical diagnosis using CT scans and (RT-PCR), adding thousands of new cases to the total count. WHO defined the diagnosis of MERS initially as patients presenting with a cough, fever, and respiratory tract involvement.[16] Noticeable considerations for Patient history were obtained upon hospitalization, a history of contact with confirmed cases of the illness, or a history of travel or residence within the Arabian Peninsula. Severe cases were exposed to laboratory testing.[17] RT-PCR Similar to COV, was used for diagnosis. Additional serology tests for antibodies detections were developed. In Saudi Arabia (KSA), a clinical trial revealed that a combination of interferon beta-1b and lopinavirritonavir was shown to be highly effective among MERS cases.[18] Moreover, a broad-spectrum nucleotide antiviral drugs named remdesivir existing potent efficacy for the treatment of both SARS and MERS in preclinical studies.[19,20]

Confirmed SARS patients through laboratory diagnosis as they were positive (RT-PCR) result from clinical samples, each from different sites or tested in laboratories, or if there was by enzyme- linked immunosorbent assay, or neutralization assay.[21] MERS serologic testing for IgG was developed for SARS. SARS treatment involved combination therapy of ritonavir and lopinavir and was associated with considerable clinical benefit with fewer adverse clinical outcomes.[22] Antiviral broad-spectrum nucleotide named remdesivir offered potent efficacy for the treatment of both two viruses MERS and SARS in preclinical studies.[19,20]

Similarities among these viruses in their discovering and treatment as the three viruses are diagnosed definitively by utilizing cell cultures of respiratory fluid samples, RT-PCR analysis and serum antibody analysis from patients. As the three recognized viruses cause symptoms of pneumonia, and lungs radiography is an important tool for preliminary diagnosis and identification of the harshness of the disease. The viruses are treated with antiviral detected therapies, while no specific antiviral drugs has yet been discovered and verified for COVID-19. The major difference between COVID-19 and its ancestors is that this virus rarely produces runny noses or gastrointestinal signs in affected patients, which are common in MERS and SARS place cases.[14]

3.1. Mode of transmission

Person to person transmission has been confirmed, and it is thought to be spread through respiratory droplets from coughs or sneezes.[14] Primary discovered cases of COV have been found back to the seafood market, with secondary cases occurring at hospitals among health care providers who had extensive contact with COV positive patients. MERS is spread from person-to-person contact in health care facilities during the clinical phase of the disease. The transmission mainly occurs through respiratory secretions droplets from sneezing and coughing, however primary cases of the virus have been discovered and isolated to close contact with infected camels; the infected camels were recognized as the reservoir for MERS.[23] Transmission of SARS happened during person-to-person close contact, via respiratory droplets from coughing or sneezing, not as quickly as the current pandemic of COVID-19. Furthermore, fomites, fecal transmission and handling of animals slaughtering, or preparing wild animals were less common methods of transmission.[24] Droplets infections or secretions of infected persons are thought to be the major mode of transmission from contact person to persons. The infection for the COVID-19 is occurring more rapidly than in the SARS. Rates of person to person transmission were known generally to be lower for MERS.

3.2. Age, sex morbidity and mortality rate

The median ages for all cases were 49.0 years (41.0–58.0). 41 First cases discovered of the COVID-19 outbreak displayed that most patients infected with COVID-19 were males 30 (73%) of 41, 13 (32%) which included diabetes, hypertension and cardiovascular disease.[14] Of the initial 41 patients infected, 27 (66%) had been directly exposed to the seafood market and the CFR was nearly 2%.[14] 2% of the CFR has remained since the start of the pandemic. The SARS virus women represented 55.7% of those diagnosed with SARS but had a lower CFR than men (13.2 and 22.3%, respectively).27 and overall CFR of 11%.27 About 49% of cases were <40 years old with a CFR of 3%,

whereas 21.5% of cases were >59 years with the uppermost CFR among those >59 (54.5%). In contrast, MERS has a FR (35%), and due to the severity of the illness it often necessitates mechanical ventilation (in 50–89% of cases).[25] According to a study the risk of mortality and severity of MERS cases from 2012–2015, the mean age of all patients was 50 years, above half of the cases (51.1%) reported underlying comorbidities, whereas 7.6% reported direct contact with a camel. 25 Male (66.6%) Cases were predominantly and from Saudi Arabia.[26] Generally, ~35% of all MERS patients who were diagnosed have died. In Saudi Arabia the FR was higher (42%), whereas 19% positive cases were discovered in South Korea with a range from (7 – 40 %) among younger and older age groups.[27] Older age and underlying comorbidities were identified as the predominant risk factors for MERS.[26]

Across the three viruses the CFRs range from 2 to 35% (Figure 2), The highest among MERS cases and the lowest among the current outbreak, It is important to note that the CFR for COVID-19 should be interpreted carefully as the outbreak is still ongoing.

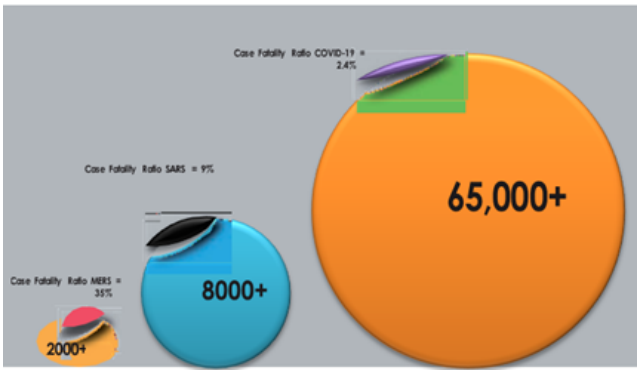

Fig. 2: CFRs range among the three viruses

3.3. *Prevention of zoonotic transmission*

COVID-19 risk factors recognized are still fundamentally unknown, how- ever, it is believed that the novel virus was transmitted from animals to humans through contaminated snakes and bats. SARS and MERS risk factors spread were through direct contact with infected animals. The suspected reservoir is supposed to be bats, similar to the SARS outbreak. The focal point of the pandemic is the seafood market in Huanan. SARS was also assumed to have arisen from one of these types of markets. The need for closure of these wholesale markets in China is mandatory due to the agreements of spread routes. China has a history of animal markets considered important and vital to communities across the country. As such, it is not likely that these markets will be closed forever, although their closure would be the strongest preventive to another zoonotic disease. The three viruses transmitted by the same way from infected animals to humans. Camel is the main reservoir for MERS virus; Bats are likely to be the reservoir for SARS. While it is still unclear whether COVID-19 was zoonotic ally transmitted disease from an infected snake or other animal at the seafood market.

3.4. *Prevention control challenges*

COVID-19 is keeping from the spread through constrained composed efforts among stakeholders with not many approaches set up stakeholder's effort, an absence of clinical supplies like deficiencies of masks, goggles, and diagnostic materials for appraisal of the diseases. Moreover, numerous cases were asymptomatic; thusly it is hard to estimate when the pandemic will top and presents further exertion in the recognition of cases. For the novel coronavirus infection in (KSA) Government Sets Preventive Regulation measures, including disconnection and isolate for all patients and anticipated people, active monitoring of contacts, limit controls and community education were performed to Forestall COVID-19 Disease Transmission. The Kingdom's government has chosen the accompanying: Access into the KSA by comings from the Assembled Emirates; the Province of Kuwait and the Realm of Bahrain will be briefly controlled to the accompanying air terminals, Jeddah King Abdulaziz International Airport in Riyadh King Khalid International Airport; and Dammam King Fahd International Airport. and Dammam Ruler Fahd Universal Air terminal. Access through land ports between the Kingdom and those three countries will be confined to the commercial trucks only, provided that the Ministry of Health takes all necessary precautions at the aforementioned airports, as well as regarding the drivers and their accompanying of those trucks in the land ports, just as in regards to the drivers and they're going with of those trucks in the land ports, where these measures will be applied immediately.[2] Any nation where the danger of the spread of the novel Coronavirus as per the rundown endorsed by the wellbeing experts in the KSA must present the PCR declaration demonstrated disease-free with COVID 19. This applies to the individuals who dwelled in those nations during the 14 days preceding entering the Kingdom.[3] The KSA government offices will recognize certify labs by the CDC13. As of March 14, 2020, an aggregate of 118 COVID-19 cases had been recognized in KSA in Various region. Novel COVID-19 patients were ordered by the essential means by which they were identified. The case definition application, contact plotting, enhanced surveillance, and laboratory testing discovered all the first one hundred patients in Makkah, Qateif city, Eastern Region, Al-Ahsa, Riyadh, and Jeddah. Quick recognizable proof and isolation of cases, isolate of close contacts, and dynamic observing of different contacts have been powerful in stifling extension of the flare-up and have suggestions for different nations episode encountering.

February 27, 2020 the WHO praised the additional public health measures taken by the Kingdom to deal with the new Coronavirus, as the office noted the decision taken by the Kingdom's government to prevent the transmission of the new Coronavirus during Umrah. The workplace communicated its certainty that this choice will empower the Saudi government to actualize economic measures to forestall and control the infection and secure the groups during this significant season. The efforts that have been taken, planned for giving most extreme security, for the wellbeing of citizens and residents, and each and every individual who means to report Kingdom lands to perform m As for Umrah, visiting the Prophet's Mosque, or for the purpose of tourism, and based on the recommendations of the health authorities that apply the highest precautionary standards and take proactive preventive measures to prevent the arrival of the novel Coronavirus (19-COVID) to the Kingdom and its spread, the Kingdom's government has clear to take the accompanying measures: Draping passage to the Kingdom with tourist visas for those originating from nations where the spread of the Novel Coronavirus (19-COVID) is a threat, The standards set by the capable wellbeing experts in the Kingdom. Balancing the utilization of Saudi nationals, and residents of the Inlet Participation Board states, to have a national personality card to move to and from the Kingdom, with the exception of Saudis who are abroad if their exit from the Kingdom is with a national identity card, and citizens of the Gulf Cooperation Council countries currently inside the Kingdom, and hope to Return from them to their countries, in the event that their entry is with the national identity card. The Ministry of Health declared the conclusion of all shopping centers, coffeehouses, cafés, and open parks except for grocery stores and drug stores. KSA recharges its help for all estimates taken to diminish the spread of the infection. The Foreign Ministry prevents all citizens to travel out to nations where the new Coronavirus (COVID) is spreading. MOH in KSA prompted every single clinical professional to be watchful for suspected COVID-19 patients. An affirmed case was characterized as a positive test for SARS-CoV-2, the infection that causes COVID-19, by switch interpretation polymerase chain response (RT-PCR) or a positive viral micro neutralization counteracting agent test utilizing a SARS-CoV-2 virus isolate novel COVID-19/KSA/27/2020). At emergency clinics, patients with suspected COVID-19 uncovered chest radiographs and RT-PCR testing on at any rate two nasopharyngeal swabs gathered 24 hours separated 13, Doctors are approved to report all suspected and affirmed COVID-19. The case definition was refreshed commonly following the episode's begin to adjust to creating worldwide circumstances. The MOH completed contact following around affirmed cases to distinguish people who may have been contaminated. Contacts with fever (temperature $\geq$ 38°C) or respiratory signs were moved straightforwardly to an emergency clinic for additional testing and testing. Close contacts were characterized as having close (inside 6ft [1.5 m]) and delayed (by and large $\geq$25 minutes) contact with the COVID-19 patient. Asymptomatic close contacts were put under isolate for 14 days, and contacts at lower hazards were put under dynamic watching. Evaluating all contacts for fever or respiratory signs by general wellbeing authorities during the isolate or checking period. Contacts that became indicative were moved to a medical clinic. The observation was improved in February 2020 by testing the accompanying gatherings for COVID-19: All patients with pneumonia, Patients in ICU with conceivable irresistible causes; and infectious diseases lead to passing (Death). The KSA effectiveness of early estimation surveillance and containment efforts was surveyed from the episode's beginning until March 14 by ascertaining the 7-day moving normal of the span from side effect beginning to separation in an emergency clinic or isolate. The offered preventive measures give a sign of the time exhausted inside the network when a COVID-19 man is conceivably irresistible. Contrasts in the rates of cases recognized through the diverse reconnaissance segments were tried utilizing the chi-squared test. Affirmed COVID-19 cases, the normal patient age was 43 years interquartile go. The dominant part (72%) of patients were matured 33–60 years. RT-PCR affirmed 100 % of cases. On 2 March 2020 KSA affirmed its first case, a Saudi national coming back from Iran through Bahrain. On 4 March, Saudi Arabia detailed the second coronavirus case, a companion of the first, who crossed the interstate from Bahrain without uncovering that he had visited Iran. On 5 March, Saudi Arabia's Service of Wellbeing declared three new instances of coronavirus; two of which are a couple who went from Iran through Kuwait and one, another friend of the first and second cases. On 6 March, the Service of Wellbeing reported a further two cases, both being female. One was from Iran through Bahrain and the other were from Najaf, Iraq through the Emirates. Both didn't tell the specialists where they had been and therefore, were allowed in. On 8 March, the Service of Ministry of Health declared 4 additional cases. Three of the four patients are residents who were in contact with past tainted cases showing up from Iran, and the fourth case is a resident showing up from Iran by means of the United Arab Emirates. On 9 March, Saudi specialists declared the disclosure of four all the more new coronavirus cases. The new cases incorporate a Saudi national, two Bahrainis, and an American. New cases have been isolated in Qatif and Riyadh. On 10 March, the Ministry of Health declared 5 additional cases, carrying the aggregate to 20. On 11 March, 1 an Egyptian case had been reported from the Ministry of Health followed by a further declaration by 24 additional cases around the same time the 21 of which are Egyptians who had been in contact with an individual who recently tried positive, taking the nation's

aggregate to 45. On 12 Walk, the Service of Wellbeing reported 17 new cases, getting the all-out the Realm to 62. On March 13, the Service of Wellbeing declared 24 new cases, acquiring complete Saudi Arabia to 86. On March 14, the Saudi Ministry of Health declared 17 new cases, getting absolute Saudi Arabia to 103. (Figure 1) Appropriation on COVID-19 in Saudi Arabia. In KSA reconnaissance not found any patients for flu-like ailment. A considerable distinction was found in the level of cases recognized by the different observation techniques, contingent upon whether the cases were connected to another COVID-19 patient or by traveling, contrasted and cases that couldn't be connected to another case ($p<0.001$). Among connected cases, the biggest extent (62%) was recognized through correspondence, while among unlinked cases, the biggest extent of cases (58%) was identified through enhanced surveillance (Figure 3),

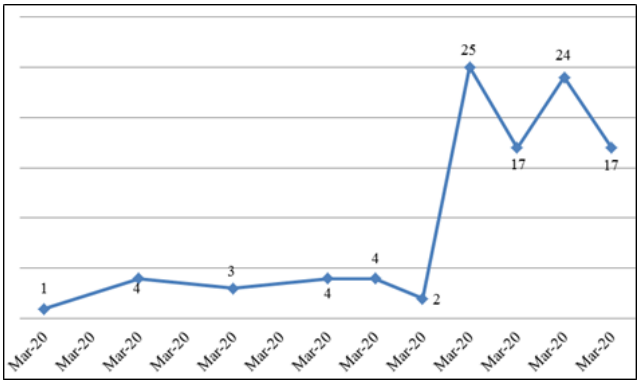

Fig. 3: Distributions on COVID-19 in Saudi Arabia:

SARS spread worldwide, due to many of the clinical symptoms of the disease being unknown early in the course of the outbreak. Symptoms of SARS presented rapidly, health and hospital were ill- ready. This linked to the insufficient communication of the Chinese authorities with the public led to anxiety. Additionally, the lack of infectious disease units in hospitals added complexity to its control. The pandemic cost the global economy an estimated $30–$100 billion.[28] MERS did not spread worldwide rapidly, in part due to the lower risk of contact person to person transmission. Subclinical cases also offered an extra layer of complexity in the control of the disease. The disease eradication is the inconsistency of infection control in the region most heavily impacted by the MERS. COVID-19 attributed to their origins in China. Spread of these viruses, including contact to live animals at open markets, lack of health infection preventive measures facilities and lack of transparency officially between governments. MERS and COVID-19 are also like in that cases can remain asymptomatic while still spreading the disease.[28] These viruses all erupted with no specific vaccine or recommended treatment. This is hindering efforts by health care providers to limit the spread of COVID-19.

3.5. Lessons Learned

Healthcare providers were infected at high rates during the SARS and MERS outbreaks, with 18.6% of MERS cases occurring in Healthcare providers and 21% of SARS cases.[29,30] They are infected in part through the use of endotracheal suction and intubation, cardiopulmonary resuscitation, nasogastric feeding and high flow-rates of oxygen. The capacity of COVID-19 to infect healthcare providers has been confirmed, although comparisons with MERS and SARS cannot yet be made.

4. Discussion

COVID-19 has developed as a serious disease, The outbreak was first declared on 31 December 2019,[31,32] and the quick spread of the infection is of worldwide pandemic.[33] During the time of the episode, from the December end to 21 January 425 cases were found, with a developing number of cases not connected to the seafood market from Huanan.[3] COVID-19 is another strain of coronavirus not recently distinguished in humans.[34] Three found Corona infections are zoonotic and cause ailment running from the basic virus to progressively extreme sicknesses, for example, MERS and SARS.[25] Firstly, a large number of the patients in the new outbreak in Wuhan announced some connect to the seafood markets and live-animal market, recommending zoonotic transmission. An animal source is the most probable essential source, and individual to individual close contact has occurred, with developing numbers of cases.13 During the outbreak, a top Chinese - designated master expressed a respiratory distress had killed at least four people with evidence of close contact transmission, heightening public concern.[34,35] It is likely that individual to-individual spread will proceed to happen, and similitudes can be attracted more near SARS than MERS, on account of the infection's fast pace of infection.[9] Person-to-individual spread happened with both SARS and MERS, it is thought to have happened through respiratory particles produced when an infected person coughs or sneezes, similar to how other respiratory pathogens spread.[16,36] This is the equivalent guessed system of transmission for COVID-19. The spread of MERS and SARS among individuals has for the most part happened between close contacts, equivalent to the present pandemic in China. As indicated by the WHO, COVID-19 contamination are extreme respiratory manifestations can prompt cut off pneumonia, serious intense respiratory trouble, kidney disappointment and death. The WHO has dvised avoidance of unprotected contact with live animals, to completely cook meat and eggs, and maintaining a strategic distance from close contact with people with cold or influenza like indications. Also, the CDC conveyed Travel Notice to stay away

from all unnecessary travel to China Preventive Control measures have been placed into impact, in spite of the fact that the planning of this direction and the fast spread of the present novel crown infection proposes that exercises from the past SARS and MERS epidemics were not taken note. Breathing difficulties, Serious cases can prompt pneumonia, extreme intense respiratory syndrome, kidney failure and death.[9] Meanwhile there is no specific treatment for coronaviruses,[9] there is an crucial need for surveillance of humans infected patients with COVID-19. The mutual role of internet plays a very important role in preventing the spread of pandemic zoonotic infectious disease. Collection of the pandemic data and analysis, Remote medical assistance should also be adopted to detect and control zoonotic infectious disease outbreaks.

Protective measures had been taken by airport authorities around the world to reduce the risk of COVID-19. Screening for all travelers is needed to contain the spread of COVID-19. Patients must be stated to the Health authorities. After further investigation, symptomatic travelers need to be sent to hospitals for further care. This may verify difficult due to the subclinical nature of some patients.

Affected countries should look to past accomplishments and failures of coronavirus spread to stop the spread of the COVID-19 outbreak. From MERS and SARS exercises gained from outbreaks can give vision into how to deal with the present pandemic. These include proper application of standard preventive estimates like appropriate hand cleanliness, and appropriately ventilated social insurance offices, detachment of people with suspected side effects, and forestalling direct contact. At last, KSA service of wellbeing set a Hierarchy of COVID - 19 spread control through specific tips, 1) Isolate yourself from world if conceivable, Be with your family and remain at home (Elimination), 2) If can't detach utilize remote methods for work … . Use web and telephone if conceivable (Substitution). 3) Keep a beware of body temp. Hacking, wheezing and wash your hands much of the time (Engineering Control). 4) Maintain social separating; Keep a separation of 1-2 meter while conversing with individuals (Administrative control). 5) Better use mask while going outside (PPEs). Necessary effective preventive measures essential to be taken to avoid the changeable risk of ongoing outbreaks and the possibility of a local outbreak turning into a worldwide pandemic.

5. Source of Funding

None.

6. Conflict of Interest

None.

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