

COVID-19: ITS INCIDENCE AND RECOVERY AMONG GLOBAL POPULATION - A REVIEW

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ABSTRACT:

Background:

Coronavirus disease 2019 is an infectious disease caused by severe acute respiratory syndrome . The disease was first identified on december 2019 in Wuhan,the capital of China Hubei province and has since spread globally resulting in the ongoing 2019-2020 coronavirus pandemic. Most recently,the middle east respiratory syndrome coronavirus(MERS-COV)was first identified in Saudi Arabia in 2012. In a timeline that reaches the present day which is an epidemic of cases with unexplained low respiratory infection detected in Wuhan,the largest metropolitan area in China’s Hubei province which was first reported to the WHO country office in China,on dec 31,2019.

Aim:To review the incidence and recovery of COVID-19 pandemic outbreak among the global population.

Materials and methods: This is a literature review conducted using article sources from databases-Scopus and PubMed from september 2019 to April 2020. The articles are screened for data extraction and the characteristics of studies are tabulated. The collected data is analysed and the results are reported.

Results and Conclusion: The findings of the review suggests that the recovery cases are less compared to active cases,because it is so contagious which represents the average number of people to which a single infected person transmits the virus is relatively high.

KEYWORDS: COVID 19; Coronavirus; Affected cases; death rate; recovery cases;

INTRODUCTION:

Coronavirus disease 2019 is an infectious disease caused by severe acute respiratory syndrome [1].The disease was first identified on december 2019 in Wuhan,the capital of China Hubei province and has since spread globally which resulting in the ongoing 2019-2020 coronavirus pandemic[2].Most recently,the middle east respiratory syndrome coronavirus(MERS-COV)was first identified in Saudi Arabia in 2012[3].In a timeline that reaches the present day which is an epidemic of cases with unexplained low

respiratory infection detected in Wuhan, the largest metropolitan area in China's Hubei province which was first reported to the WHO country office in China, on Dec 31, 2019[4].

Researchers around the world are working to develop potential treatments or vaccines against the respiratory diseases that have killed approximately 47,000 people infected almost a million in just a few months[5]. Coronavirus is popular as it spreads to many countries around the world.[6]. Recent researchers say COVID 19 is becoming a disease that divides us by race, class and age March 22, 2020[7]. Previously our team had conducted numerous clinical trials[1,2][2,8] [9][9,10][11][12] and laboratory animal studies[13][14][15][16,17] and in-vitro studies[18,19,20] over the past 5 years. Now we are focusing on epidemiological surveys and reviews. This idea for this survey stemmed from the current interest in our economy. People may be sick with the virus for 1 to 14 days before developing symptoms[21]. The most people recover from the disease without needing any special treatment [21,22][23].

The aim of the review is to analyze the effects of pandemic COVID 19 virus in terms of incidence and recovery in various cultural backgrounds in the global population.

Materials and methods: This literature review is conducted using article sources from database Scopus and PubMed in 2020. The search keywords used are COVID 19, Coronavirus, Affected cases, death rate and recovery cases. The selected articles are assessed for their quality and are at low risk of bias. The data extracted from the collected articles and tabulated (Table- 1) and their characteristics are analysed and the results are reported.

RESULTS:

Characteristics of Included studies:

This review states that there are many variations in the cultural background. In several states, the statistics reported of COVID-19 deaths are attributed to African-Americans isn't only greater than their share of the state population – it's quite double. In Kansas, for instance, African-Americans account for nearly a 3rd of reported COVID-19-related deaths but just 6% of the state population, in Michigan they account for 41% of reported deaths and 14% of the population, and in Illinois they account for nearly 34% of reported deaths and fewer than 15% of the population. Early data of the Covid-19 crisis, reduced by race, is alarming. In the US, in Chicago, as of early April 2020, 72% of individuals who died of coronavirus were black, although only one-third of the city's population. In Georgia, as of 17 April, White race accounted for 40% of Covid-19 cases where race was reported, although they represent 58% of the state. In the UK, of the primary 2,249 patients with confirmed Covid-19, 35% were non-white. This is much higher than the proportion of non-white people in England and Whites – 14%, according to the most recent census.

DISCUSSION:

Incidence and Recovery of COVID-19 among Global Population:

In a study, the novel coronavirus was renamed as COVID-19 by WHO. Infection from the virus has since increased exponentially and has spread all over the world in more than 196 countries. The WHO has declared a Public Health Emergency of International Concern due to the outbreak of COVID-19[24]. The virus is highly infectious and can cause human-to-human transmission. Every 24 hours, cases of COVID-19 increased several fold. The WHO is monitoring the SARS-CoV-2 spread very closely via a global surveillance system. The current situation demands the enforcement of strict laws which would help in inhibiting the further spread of COVID-19. Social distancing, international travel restrictions to affected countries, and hygiene are three important ways to nullify SARS-CoV-2.[25]

In a recent study COVID-19 has affected 85 403 patients in 57 countries/territories and has caused 2924 deaths in 9 countries. The incidence ranged from 61.44 per 1 000 000 people in the Republic of Korea to 0.0002 per 1 000 000 people in India. The daily cumulative index (DCI) of COVID19 (cumulative cases/no. of days between the first reported case and 29 February 2020) was greatest in China (1320.85),

followed by the Republic of Korea (78.78), Iran (43.11) and Italy (30.62). [26]. According to the present condition of COVID-19 71% cases were males. The older people are most likely to get infected by COVID 19, the WHO organisation plays a major important role to control COVID 19.

In a study, this new species of coronavirus has been termed 2019-nCoV and has caused a considerable number of cases of infection and deaths in China and, to a growing degree, beyond China, becoming a worldwide public health emergency. 2019-nCoV has high homology to other pathogenic coronaviruses, such as those originating from bat-related zoonosis (SARS-CoV), which caused approximately 646 deaths in China at the start of the decade. The mortality rate for 2019-nCoV is not as high (approximately 2---3%), but its rapid propagation has resulted in the activation of protocols to stop its spread. This pathogen has the potential to become a pandemic. It is therefore vital to follow the personal care recommendations issued by the World Health Organization. [26,27].

The limitation of the study is the less number of articles extracted for the review process. More research in this context should be conducted to identify the preventive measure and measures to control the COVID 19 pandemic outbreak.

CONCLUSION

From the review it can be concluded that the recovery cases are less compared to active cases, because it is so contagious which it represents the average number of people to which a single infected person transmits the virus is relatively high in the global population.

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Authors contribution:

Serial number	Author name	Contribution
1	Soorya Ganesh	Study design, data collection, drafting manuscript
2	Dr. Lavanya Prathap	Revising manuscript, final approval of the manuscript
3	Dr. V. Vishnu Priya	Collection of reviews, drafting manuscript
4	Dr. Preetha.S	Collection of reviews

Conflict of interest: None to declare.

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TABLE 1:

DATA SUMMARY TABLE

Author and Year	Prevalence as on	Globally Affected cases	Globally recovered cases	Global Deaths
M Palacios,cruz, 2020	13th February, 2020	46,997	-	1,368
Chih-Cheng Lai, 2020	12th march 2020	85,403 in 57 countries	-	2,924
N Srivatsva et al, 2020	March 25th 2020	4,13,467	1,03,366	18,433

