Humans Stop Eating Everything That Moves! The High Importance Role of Humans' Food-Consumption Pattern in the Incidence of Emerging Diseases

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Abstract
This commentary provides an update to the last situation of 2019 novel coronavirus pandemic (COVID-19) in the world. Current known evidence for COVID-19 suggests that we are now faced with the most virulent coronavirus and epidemic that the world has ever seen. The coronaviruses already identified such as severe acute respiratory syndrome coronavirus, Middle East respiratory syndrome coronavirus, and nowadays COVID-19, may only be the tip of the iceberg, and probably more novel and severe zoonotic infections might be revealed in the near future in the humans' populations. However, in this pathway, the important issue that often has been neglected is the change and reforming of the person's lifestyle and eating habits.

Keywords: Humans' food-consumption pattern; Emerging diseases; 2019 novel coronavirus (COVID-19)


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Introduction
The epidemiological and health transitions (shifting from infectious diseases to non-communicable diseases) [1,2] in the new era creates false optimism about getting rid of infectious diseases which they often were known as the main cause of occurring the rapid
outbreak, epidemics, and pandemics in the human populations. For this reason, in most developed countries and also in some developing countries non-communicable diseases such as heart disease and cancers, etc. are considered as the first priority for the prevention and allocation of health funds. It is the sad fact that in the past few decades, new emerging diseases have emerged and spread in different geographical areas. Among the pathogenic infectious agents, viruses are most commonly transformed to cause emerging diseases. The most prominent examples of them in recent decades are as follows:

**Sever Acute Respiratory Syndrome (SARS-CoV)**

This coronavirus first appeared in Southern China in November 2002 and spread to more than 24 countries in Asia, North America, Europe, and South America. The virus has been transmitted to people from civet cats. According to World Health organization (WHO) data, from the beginning of November 2002 until April 2004, a total of 8094 people in thirty countries were infected with SARS, of the 774 cases have died. Percentage of case fatality rates (%CFR) for this infection calculated about 10% [3,4].

**Middle East respiratory syndrome coronavirus (MERS-CoV)**

This coronavirus first appeared in September 2012 from Saudi Arabia. According to the last updates of WHO data, since September 2012, WHO has been notified of 2494 laboratory-confirmed cases of infection with MERS-CoV including 858 associated deaths from 27 countries across the world. The patterns of transmission and origins of MERS-CoV remain unclear, and based on the analysis of different virus genomes, it is declared that it may have originated in bats and was transmitted to camels sometime in the distant past. %CFR for this infection calculated about 34.40% [5-9].

**Ebola virus disease**

The first Ebola virus disease outbreaks occurred in remote villages in Central Africa, near tropical rainforests. The 2014–2016 outbreak in West Africa was the largest and most complex Ebola outbreak since the virus was first discovered in 1976. The last outbreak related to the Ebola virus started in Guinea and then moved across land borders to Sierra Leone and Liberia. Up to now, based on WHO data, a total of 3421 Ebola cases have been confirmed, including 2242 deaths across the world. The virus has been transmitted to people from wild animals such as fruit bats, porcupines, and non-human primates. %CFR for this infection calculated range from 25% to 90% [10, 11].

**Zika virus**

The large outbreak related to this infection was first reported in 2007 in Yap Island. WHO on 1st of February 2016 introduced Zika virus infection as a public health emergency in the world? During the Zika epidemic in Brazil, the number of reports of microcephaly in newborns was increased [12].

**2019 Novel Coronavirus (COVID-19)**

On 31 December 2019, a cluster of asymptomatic pneumonia cases from Wuhan City (it is the largest city in Hubei province with a population of over 11 million in central China), has been reported to WHO. The concern of Chinese authorities and global experts raised on 7 January, when the Chinese authorities after a complex epidemiologic investigation confirmed that they had identified a new coronavirus that did not match with other known coronaviruses such as SARS-CoV and MERS-CoV. This a novel coronavirus was formally named novel coronavirus (COVID-19). The clinical presentation of the COVID-19 was cough and fever [13]. At the time of writing this article (2020 February 17), the application of Johns related to COVID-19 pandemic in real time has been shows that 71335 laboratory-confirmed cases of 2019-nCoV from 28
involved countries across the world including 1776 associated deaths since the last December 2019 until 2020 February 17. The %CFR related to 2019-nCoV is equals to 2.24% up to now [10]. Current known evidence for COVID-19 suggests that we are now faced with the most virulent coronavirus and epidemic that the world has ever seen. The basic the reproductive rate of 2019-nCoV has been reported 3 or 4-fold more rather than to similar coronaviruses such as SARS-CoV. According to WHO estimates, the COVID-19 latency period is between 2 and 10 days. The virus can also be transmitted during this mentioned period. The basic the reproductive rate of 2019-nCoV has been reported 4-fold more rather than to similar coronaviruses such as SARS-CoV [14]. The origin of COVID-19 is still under investigation, but the structure of coronaviruses is such that it can be transmitted from animal to human. The earliest evidence so far shows that the genetic structure of the COVID-19 is very similar to the virus observed in the bat. In fact, most of the time animal footprints are evident in the mentioned recent emerging diseases in human populations. The natural changes that are happening on earth such as increase the air temperature, ecological changes, the speed of transportation of people and goods, changes in the production and distribution of animal and animal products and etc. all are contributing factors to the incidence of emerging diseases. However, in this pathway, the important issue that often has been neglected is the change in a person's lifestyle and eating habits. In the media, we often see that in some parts of Asia or Africa it is common to eat bats, snakes, cats, and etc. Unfortunately, in the world that we live in, some people in some countries have not taken scientific achievements seriously, and sometimes they ignore it. Such people know that this world is normal and created with a certain discipline, however, they disrupt this discipline and feed on foods that are outside of the human food chain. This human behavioral factor itself is the main cause for the entry of unknown and mutated viruses and in some cases, entering another microorganism into the human body, and as a result occurring the unpredicted outbreaks, epidemics, as well as unwanted pandemics in human societies. It is the fact that humans in some parts of this global village should stop eating everything that moves, especially in the situations that they are not involved in crisis and war; If they will not get involved in a more severe pandemic in the near future due to another unknown emerging infection.

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References


