

A Relationship between Coronavirus Publications and Coronavirus-Related Infectious Diseases

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There are well-known coronavirus-related infectious diseases such as the Severe Acute Respiratory Syndrome (SARS) in 2003 (Ksiazek et al., 2003) and the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in 2013 (Cauchemez et al., 2013). Recently, an outbreak of a febrile respiratory disease due to the 2019 novel coronavirus (2019-nCoV) was appended in the central Chinese city of Wuhan on 31 December 2019. (Cohen, 2020; Hui et al., 2020). The World Health Organization (WHO) officially names the new disease on 11 February 2020 as COVID-19 (Cohen & Kupferschmidt, 2020). WHO chief Tedros said that “CO” stands for “corona”, “VI” for “virus” and “D” for “disease”, while “19” was for the year, as the outbreak was first identified on 31 December 2019 (Aljazeera, 2020).

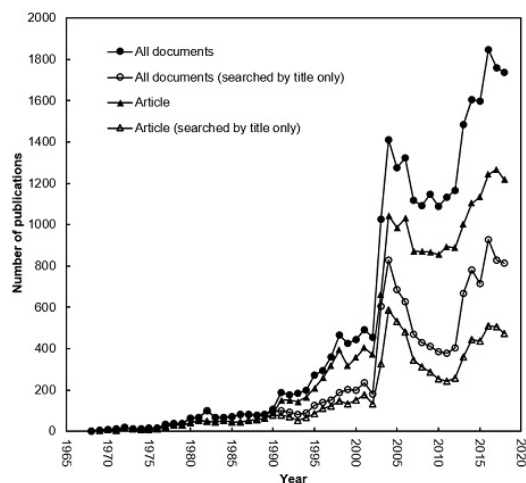
The total number of all document types and articles searched by all coronavirus-related keywords such as “coronavirus”, “coronaviruses”, “anticoronavirus”, “gammacoronaviruses”, “rotacoronavirus”, “betacoronavirus”, “alphacoronavirus”, “deltacoronavirus”, “gammacoronavirus”, “corona virus”, “corona viruses”, “severe acute respiratory syndrome”, “acute respiratory distress syndrome”, “SARS outbreak”, (“SARS” and “2003”), (“SARS” and “virus”), (“SARS” and “viruses”), (“SARS” and “infection”), (“SARS” and “infections”), (“SARS” and “infectionn”), (“SARS” and “respiratory”), (“SARS” and “respirator”), (“SARS” and “respirators”), “Middle East Respiratory Syndrome”, “MERS outbreak”, “Middle East respiratory syndrome coronavirus”, “Middle

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East respiratory syndrome coronaviruses”, “MERS-CoV”, “Human Coronavirus Erasmus Medical Center”, “hCoV-EMC”, “coronavirus respiratory illness in Saudi Arabia”, (“MERS” and “2013”), (“MERS” and “virus”), (“MERS” and “viruses”), (“MERS” and “infection”), (“MERS” and “infections”), (“MERS” and “respiratory”), and (“MERS” and “respirators”) in 1) topic (including title, abstract, author keywords, and *KeyWords Plus*) and 2) titles only in Science Citation Index Expanded (SCI-EXPANDED) are displayed in Figure 1 respectively. There are two sharply increasing of number of articles and all documents after 2002 and 2012 that because of Severe Acute Respiratory Syndrome (SARS) (Ksiazek et al., 2003) and Middle East Respiratory Syndrome Coronavirus (MERS-CoV) (Cauchemez et al., 2013) outbreak in 2003 and 2013 respectively. Similar development trends were also found in researches of SARS-CoV, MERS-CoV, and 2019-novel CoV (Bonilla-Aldana et al., 2020).

Figure 1.
Development trend of coronavirus articles



The six articles with more than 1000 total citations from Web of Science Core Collection since their publication to the end of 2018, were published in 2003 such as articles by Ksiazek et al. (2003), Drosten et al. (2003), Rota et al. (2003), Peiris et al. (2003), and Marra et al. (2003) and by Zaki et al. (2012).

The outbreak of SARS in 2003 and MERS-CoV in 2013 made not only the increasing numbers of publications but also the emerging of high impact publications. Obviously a relationship between the publications and the diseases was found. Therefore, it can be expected that COVID-19 related researches will be focused since December 2019, a large outbreak of a novel coronavirus (2019-nCoV) in China (Riou & Althaus, 2020) and has caused a massive global outbreak (Lai et al., 2020). Thus, numbers of publication will be sharply increased, and even more, high impact publications will also be presented.

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