

“Trends in Hospitalizations for Asthma During the COVID-19 Outbreak in Japan” Concluding Decline in Asthma Patient Hospitalization During COVID-19 Outbreak Published Though The Journal of Allergy and Clinical Immunology: In Practice from the American Academy of Allergy, Asthma and Immunology (AAAAI)

A study using MDV database which is the large-scale medical database owned by Medical Data Vision Inc.(Chiyoda-ku, Tokyo; Hiroyuki Iwasaki, President & CEO) has revealed that the number of asthma hospitalizations during the epidemic of novel coronavirus infection (COVID-19) has declined. The study was conducted by Assistant Professor Atsushi Miyawaki's team at Department of Public Health, Graduate School of Medicine, the University of Tokyo in collaboration with Masaki Nakamura, a director of MDV, and Hideki Ninomiya, Department of Health Policy and Management, Keio University, who also serves as president and CEO of DATAC, and a physician. The paper was published on October 13th, 2020 in The Journal of Allergy and Clinical Immunology: The official journal of the American Academy of Allergy Asthma and Immunology (AAAAI).

[https://www.jaci-inpractice.org/article/S2213-2198\(20\)31110-7/abstract](https://www.jaci-inpractice.org/article/S2213-2198(20)31110-7/abstract)

It is common that viruses that cause infect the trachea and lungs exacerbate asthma ultimately leading to assumptions that COVID-19 is also an impact factor which could lead to exacerbate asthma control. In the early stages of COVID-19, among health care professionals, there were concerns about possibility of increase in the number of asthma hospitalizations due to lack of asthma control. Subsequent reports from Europe and the United States suggest otherwise showing that the number of emergency room visits and hospitalizations due to asthma have declined; however, these reports were from small-scale studies those the population were small. Studies utilization based on a larger population and different location from a large-scale database was awaited to see if this trend. Therefore, MDV database was used to examine 272 DPC hospitals across the country where we were able to continuously observe weekly trends in the number of inpatients with asthma as their primary disease (the most medically resource intensive disease) between January 2017 and May 2020 for this study.

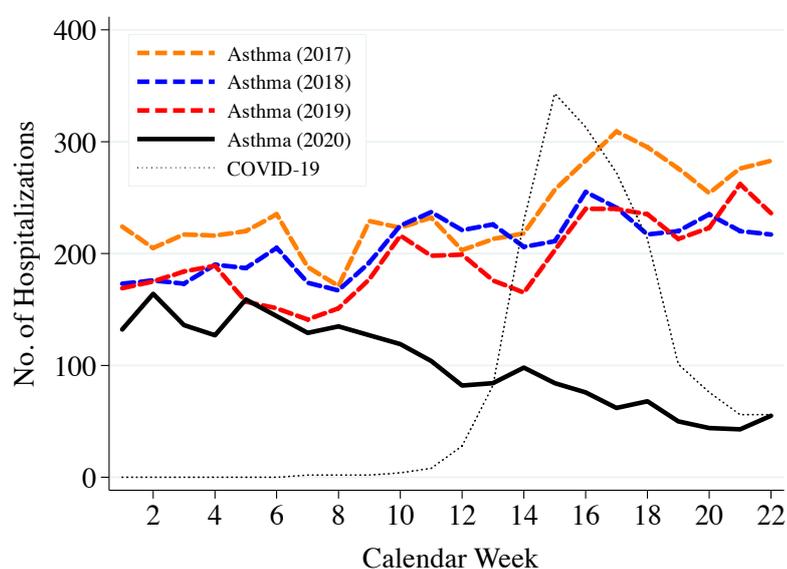
Within this study, compared to the spring (the ninth month of 2019, after early March and beyond) to early summer previous year, where there were increase trend the number of patients with asthma hospitalization; opposite results of decrease in asthma hospitalization were confirmed in 2020 (Figure). In an analysis statistically adjusted for trends by year and week, the average number of hospitalizations due to asthma after the ninth week of 2020 was 0.45 times higher (95% confidence interval 0.37-0.55; $p < 0.001$) than in the same period from 2017 to 2019. This trend was observed in both children and adults under 18 years of age.

While possibilities of that the COVID-19 epidemic itself may have worsened asthma control remains, preventive actions such as prevention actions for infections and reduced exposure to allergens (e.g., pollen) by wearing masks may have reduced the number of asthma attacks in society as a whole. The dramatic reduction in hospital admissions due to asthma observed in this study suggests that lifestyle changes on an individual and society could prevent the majority of hospitalizations due to asthma. The study reminded us of the importance of preventive action and consideration of the living environment for good control of asthma.

【Bibliographic Information】 Abe, K., Miyawaki, A.*, Nakamura, M., Ninomiya, H., Kobayashi, Y. (2020) Trends in Hospitalizations for Asthma During the COVID-19 Outbreak in Japan. The Journal of Allergy and Clinical Immunology: In Practice

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*Corresponding Author



<Contact>

Medical Data Vision Inc.

MAIL: ebm_sales@mdv.co.jp

Department of Public Health,
 Graduate School of Medicine,
 The University of Tokyo

Assistant Professor

Atsushi Miyawaki

MAIL : amiyawaki-tky@umin.ac.jp

[Press contact]

Medical Data Vision Co., Ltd. EBM unit. (Contact: Miss. Arisa Hasegawa) Email: ebm_sales@mdv.co.jp