

# The Impact of the COVID-19 Pandemic on the Plastic Surgery Literature

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## **BACKGROUND**

The COVID-19 pandemic had an immense effect on the plastic surgery community, and it has been the focus of discussion in public and private discourse for over a year.<sup>1</sup> Given this impact, the purpose of this study was to examine the influence of the COVID-19 pandemic on the plastic surgery literature.

## **METHODS**

Using the *Journal Citation Reports*, 15 plastic surgery journals with the highest impact factor in 2019 were selected and all articles published in these journals in 2020 were extracted.<sup>2</sup> For the 6,815 articles identified, number of citations accrued and Altmetric Attention Score, which is a weighted calculation of the attention an article receives online, were recorded.<sup>3</sup> COVID-19 related articles were identified by searching titles for "COVID", "SARS", "pandemic", "corona", "COVID-19", or "SARS-CoV-2". Kruskal-Wallis, Mann-Whitney, and Chi-Squared tests were used where appropriate.

## **RESULTS**

A total of 220 (3.2%) articles related to the COVID-19 pandemic were published during 2020 from 11 of the 15 journals included in the analysis (Figure 1). A total of 23 countries were represented in authorship, with the most common being the United States, the United Kingdom, and Italy. There were 27 first authors who published more than one article with their contributions accounting for 28% of the COVID-19 related literature in plastic surgery. Sixty percent of articles discussed the effects of COVID-19 on the field of plastic surgery overall, whereas the remainder discussed implications for specific subspecialties: 14% craniofacial, 10% reconstructive microsurgery, 9% cosmetic, 5% hand, and 2% dermatology. The overwhelming majority of articles were editorials or commentaries (59%), followed by original articles (33%), and guideline statements (8%). When compared to non-COVID-19 articles, COVID-19 related

articles had significantly higher mean AAS (2.1 vs. 1.4,  $p < 0.001$ , Figure 2) and citations (1.1 vs 0.2,  $p < 0.001$ , Figure 3).

## **CONCLUSION**

There have been a substantial number of articles published related to the COVID-19 pandemic. Both AAS and citation count were higher for COVID-19 related articles revealing the high levels of discussion among plastic surgeons about the pandemic and its ramifications on the field. This interest in and impact of the COVID-19 pandemic has been preserved in the plastic surgery literature.

## **REFERENCES**

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