

Reflecting upon the Long-term Impact of COVID-19 on Cosmetic Plastic Surgery and Education

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Summary: As we enter a new year, this article serves as an opportunity to ponder on the impact of a worldwide pandemic on physicians and the field of plastic surgery, which began 4 years ago in January 2020. When looking at the data in the general-surgery and reconstructive literature, the surgical treatment of patients with COVID-19 appears safest 8 weeks after infection. It was also found that the so-called Zoom-boom crush of cosmetic surgery cases following pandemic lockdown appeared to be largely due to a backlog of cases. Cosmetic surgery, particularly facial cosmetic surgery, continues to increase in popularity year over year. However, the effects on plastic surgery training remain unclear. Even so, those affected by the pandemic seem more driven than ever to find job stability and security. (*Plast Reconstr Surg Glob Open* 2023; 11:e5359; doi: 10.1097/GOX.0000000000005359; Published online 16 October 2023.)

INTRODUCTION

On May 17, 2022, the United States marked a significant moment as it exceeded one million deaths related to COVID-19.¹ In December of 2022, China decided to end its zero-COVID policy, leading to the lifting of lockdowns and reigniting concerns about a potential resurgence on a global scale. As we entered a new year, it became an opportunity to ponder on the impact of a worldwide pandemic on physicians and the field of plastic surgery, which began 4 years ago in January of 2020.

PUBLICATION RUSH

Submissions to medical journals increased by more than 50% in the first few months amid lockdowns across the nation. In less than a year, more than 100,000 papers were published in the medical literature addressing COVID-19.² The healthcare field was inundated with a barrage of information with varying degrees of clinical utility.

Initial clinical data focused heavily on reconstructive surgery. A new disease gave way to a bevy of case reports and small case series focused on surgical treatment of

patients found to have COVID-19. Patients with COVID-19 were found to be more susceptible to thrombosis and microembolization, a potentially serious implication for microsurgical reconstruction in particular.³⁻⁵ Multiple case series were published which showed varying degrees of success in microsurgical reconstruction of COVID-19 patients.⁶⁻⁸ Resource constraints and trepidation about lengthy procedures in patients with an unpredictable and potentially lethal disease pushed some to take a step back down the reconstructive ladder, demonstrating the versatility of plastic and reconstructive surgery in an environment requiring malleability and swift adaptation.⁹ An article from Deng et al demonstrated an increase in surgical complications up to 8 weeks after COVID-19 diagnosis in a large retrospective cohort of major elective surgical patients.¹⁰ Although there were few large meta-analyses or multi-institutional studies of outcomes after plastic surgery specifically, major reconstructive surgery appears to have had similar complication rates.¹¹

THE ALLEGED “ZOOM-BOOM”

As elective surgery was put on hold for several months at some hospitals, there was great concern of growing surgical backlogs and consequential loss of revenue. However, emergence from lockdown and resumption of elective surgery led to sharp rebound of patients seeking cosmetic surgery. This was labeled the “Zoom-boom” by many media outlets who reported that as people were looking at themselves more often on video conferencing platforms such as Zoom (Zoom Video Communications Inc., San Jose, Calif.), they were increasingly noting aesthetic concerns and seeking cosmetic surgery, especially facial

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cosmetic surgery (FCS). Available data from the annual report from the American Society of Plastic Surgeons draw scrutiny to these claims. In fact, it seems that there was a drop in almost all cosmetic procedures in 2020 compared with 2019. In the year before the pandemic, there was a sharp uptick in FCS—facelifts more than doubled, and nearly 150,000 more blepharoplasties and rhinoplasties were performed than in the year prior. The number of FCSs performed, it seems, had already made a remarkably large jump by 2019 and merely maintained those gains in the pandemic in 2020.^{12–14} There was also a decrease in all minimally invasive cosmetic procedures (ie, botox injections, chemical peels, laser skin treatments, etc.) in 2020. In the first year of the pandemic, only two procedures had appreciable increases: gluteal implants, and breast implant removal, perhaps implicating the rising trend of reported breast implant illness.¹²

The American Society of Plastic Surgeons data for 2021 has not yet been made publicly available. However, the Aesthetic Society reported continued increases in 2021: a 55% increase in FCS, 48% increase in breast surgery, and 63% increase in body contouring procedures.¹⁵ This suggests that perhaps demand was not increased in 2020 due to the pandemic and discredits the largely popularized Zoom-boom theory. Rather, these reports suggest a relative increase in cosmetic surgery in the immediate aftermath of lockdowns due to a backlog of cases. Cosmetic surgery continues to grow, rather than contract as we enter the postpandemic era.

The conjecture that patients were pressed to cosmetic surgery after confronting their appearance on screen has also been challenged. Sharma and Asaria surveyed patients who underwent facial plastic surgery between May and July 2020. Notably, they found social media use was up in all respondents. Those who reported an increase in FPS awareness were prone to using Instagram more heavily than in the prepandemic period. This perhaps suggests that, at least as self-reported, patients may have been driven toward FPS during the pandemic by peer influence or even by savvy marketing through video and picture based social media platforms. They noted that patients driven toward FPS tended to have an increase in their budget or the same budget as before the pandemic.¹⁶ However, an increase in disposable income does not seem to have been a major contributor. Despite widely held notions, consumer spending for services fell during the pandemic. Personal savings rates increased to near double what was seen in 2019.¹⁷

HEALTHCARE “HEROES”

There has been a renewed focus on the societal impact of physicians since the beginning of the pandemic. Physicians and first responders were celebrated in commercials and on billboards. For almost a year, there were physicians featured nearly nightly on every news network. However, surveys conducted by the Pew Research Center reveal that patient perspectives of physicians did not change much during this time. In 2020, 72% of respondents rated physicians positively compared to

Takeaways

Question: What are the possible long-term impacts of COVID-19 on the field of plastic surgery and the training of future plastic surgeons?

Findings: The so-called Zoom-boom crush of cosmetic surgery cases following pandemic lockdown appears to be largely due to a backlog of cases. Cosmetic surgery, particularly facial cosmetic surgery, continues to increase in popularity. However, the effects on plastic surgery training remain unclear.

Meaning: The long-term effects of COVID-19 are yet to be revealed, but implications of the post-Zoom-boom crush are largely debunked by current trends in cosmetic surgery, and trainees and newly board-certified surgeons are motivated now more than ever to maintain stability.

74% prepandemic.¹⁸ In fact, The Gallup Poll reveals that trust in physicians has eroded in the past decade. Patients today seem less optimistic than before and have more polarizing opinions. Very few respondents reported no opinion of physicians, while far fewer reported that they felt more trust and confidence than a year prior.¹⁹ This is a dangerous direction to be headed, and the COVID-19 pandemic had very little impact on this trajectory, as the data show.

PLASTIC SURGERY AWAY ROTATIONS

The impact of COVID-19 extended beyond patient care and also had important implications for medical students aspiring to match into medical residency programs, especially competitive specialties such as plastic surgery that require several subinternship experiences. This proved to be a significant challenge in a specialty where 75% of applicants match an institution where they have been a visiting or home student. This made it exceedingly difficult for both programs and students to match with their best fit. Additionally, the limited availability of elective procedures and clinical rotations during the pandemic resulted in reduced hands-on experience for medical students at their home institutions, potentially affecting their competitiveness in the residency match process, and an overall negative impact on their education.²⁰ The long-term effects of the pandemic on the residency match process and the training of future physicians are still unfolding, but it has undoubtedly brought about a period of uncertainty and adaptation for medical residents that continues to permeate the match process to this day.

PERIPANDEMIC TRAINING

About 15% of plastic surgery residents found themselves redeployed to cover gaps during the heat of the pandemic. In an American Council for Graduate Medical Education survey, nearly a fifth of chief residents in 2020 reported feeling maximal effects on their training experience, indicating that they felt less prepared than expected after case volume loss in their final year of training.²¹ Although a considerable number reported

that they had lost a job offer or had a change in their start date, only 5% responded that they had not initially planned to do a fellowship but were now seriously considering it. Overwhelmingly, residents reported that their most important consideration upon graduation was job security.²² Although redeployment was only temporary, the effect still remains to be seen. The possible negative effects of COVID-19 on the next generation of cosmetic surgeons has yet to be revealed, however we may start to see a larger number of residents seeking fellowship training in the near future.

CONCLUSIONS

Although a glut of information was published during the pandemic, large studies on the safety and efficacy of plastic surgery treatment in patients undergoing plastic surgery remain difficult to come by. However, surgical treatment of patients with COVID-19 appears safest 8 weeks after infection. The so-called Zoom-boom crush of cosmetic surgery cases following pandemic lockdown appears to be largely due to a backlog of cases. Cosmetic surgery, particularly FCS, continues to increase in popularity. This is perhaps influenced by image-based social media platforms. Despite broad attention on the medical field, public confidence in physicians appears to be eroding and more polarizing. The effects on plastic surgery training remain unclear; however, those affected by the pandemic seem more driven than ever to find job stability.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

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