

# **Cross-Sectional Analysis of Instagram Use in American Plastic Surgery Practices**

Presenter: Darren L Sultan, MD

Co-Authors: John Perrotti, B.A., M.B.A., Plastic Surgery, SUNY Downstate Medical School; Neil Tanna, MD, MBA, Plastic & Reconstructive Surgery, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, Lake Success, NY

Affiliation: Division of Plastic and Reconstructive Surgery, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell Health

## **BACKGROUND**

The exponential growth of Instagram and other forms of social media in the past decade has led to the adoption of new avenues for advertising within the field of plastic surgery.<sup>1-3</sup> While recent studies have sought to characterize these developments, there are gaps in the objective analysis of these trends.

## **METHODS**

The study is a cross-sectional analysis of Instagram and other online media use by American Society of Plastic Surgeons (ASPS) members having completed board certification in the years 2000, 2005, 2010, 2015 and 2019. Online searches uncovered information on education, practice website, social media metrics, and practice geography. Website traffic was determined through StatShow, a website traffic data analysis tool. Geographic determination of metropolitan-based practices was made in accordance with measures relating to the rural-urban continuum codes set by the Department of Agriculture. Descriptive and quantitative statistical analysis was used to make inferences regarding the study aims.

## **RESULTS**

A total of 811 plastic surgeons were included in the study, and 11 were excluded due to insufficient data. Those with aesthetic surgery fellowship training were most likely to have a dedicated practice website and to have accounts for Instagram, Facebook, Twitter, Pinterest and Youtube as compared to those with other training backgrounds. The 1% of plastic surgeons in the overall study cohort with the highest number of Instagram followers collectively had more followers than the remaining 99% combined. Aesthetic surgery fellowship graduates had the highest average number of Instagram followers, while craniofacial surgery fellows had the fewest, though variance between all cohorts was not significant ( $p = 0.34$ ). Those completing board certification in 2010 had the highest average number of Instagram followers, while those completing board certification in 2000 had the fewest, though intergroup variance was not significant ( $p = 0.12$ ). The average number of Instagram followers and the number of posts per month did not correlate with increased website traffic (R squared values of 0.004 and 0.036, respectively). Those with metropolitan-based practices had higher website traffic ( $p = 0.01$ ) but no significant difference in Instagram followers ( $p = 0.88$ ), when compared to those in less populated regions.

## **CONCLUSION**

The study demonstrates findings from a large cross-sectional analysis of plastic surgeons from different training backgrounds, regions and years of experience. Collectively, the use of Instagram as part of a professional practice is widespread, but there is no clear correlation between its use and an increase in website traffic.

## **REFERENCES**

1. Wheeler CK, Said H, Prucz R, Rodrich RJ, Mathes DW. Social media in plastic surgery practices: emerging trends in North America. *Aesthet Surg J.* 2011;31(4):435-441.
2. Economides JM, Fan KL, Pittman TA. An analysis of plastic surgeons' social media use and perceptions. *Aesthet Surg J.* 2019;39(7):794-802.
3. Ben Naftali Y, Duck OS, Rafaeli S, Ullmann Y. Plastic surgery faces the web: analysis of the popular social media for plastic surgeons. *Plast Reconstr Surg Glob Open.* 2018;6(12):e1958.