Social Media Use and Academic Productivity Among Head and Neck Surgeons

Naveen Raj, BS[1]; Bhavya Sharma, MD[2]; Yash Gupta, BS[1]; Patrick Tassone, MD[2]
[1]College of Medicine, Northeast Ohio Medical University; [2]Department of Otolaryngology – Head and Neck Surgery, University of Missouri

Introduction

- A majority of clinicians use platforms such as LinkedIn, X (formerly Twitter), Instagram, and ResearchGate for professional networking, continuing education, and research dissemination
- Online presence is a recognized mechanism of scholarly dissemination, extending the reach and visibility of academic work
- The interplay of social media presence, academic productivity (h-index), and patient ratings has not been well studied among head and neck cancer surgeons

Methods and Materials

- This study was a cross-sectional analysis of 345 head and neck cancer surgeons who are members of the American Head and Neck Society (AHNS)
- Demographics, practice type, years since fellowship, social media presence, and research output (h-index) were compiled for each surgeon
- Composite Patient Rating Scores (CPRS) were derived from star ratings, number of reviews, and multi-platform presence to summarize each surgeon's online patient feedback
- Social Media Score (SMS) was quantified from 1-10 for each surgeon's social media presence; surgeons in the top 15% of SMS were compared with the remainder of the cohort
- Mann–Whitney U tests were used for continuous variables, chi-square analysis for categorical variables, and multivariable linear regression was used to assess the association between SMS and H-index

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Results

- Among 345 AHNS head and neck cancer surgeons, the cohort was predominantly male (77%), with a median of 10 years since fellowship (IQR 6–18)
- The median Social Media Score (SMS) was 1 (IQR 0–2), with LinkedIn the most prevalent platform
- Surgeons in the top 15% of SMS had a significantly higher median h-index than others (21 vs. 10, $p < 0.001$)
- The CPRS did not significantly differ between the higher and lower social media groups (median 7 in both, $p = 0.92$)
- Surgeons with high SMS had statistically significant greater years since fellowship (15 vs. 10 years, $p = 0.019$)
- After adjusting for years since fellowship and practice type, high SMS remained independently associated with higher h-index ($\beta = 8.14$, $p < 0.001$

Table 1. High SMS vs. Low SMS Results

	High SMS	Low SMS	P-value
H-index, median (IQR)	21 (9-30)	10 (6-21)	0.00008
CPRS, median	7	7	0.92
Academic Practice Setting	76%	61%	0.059
Years Since Fellowship, median	15	10	0.019

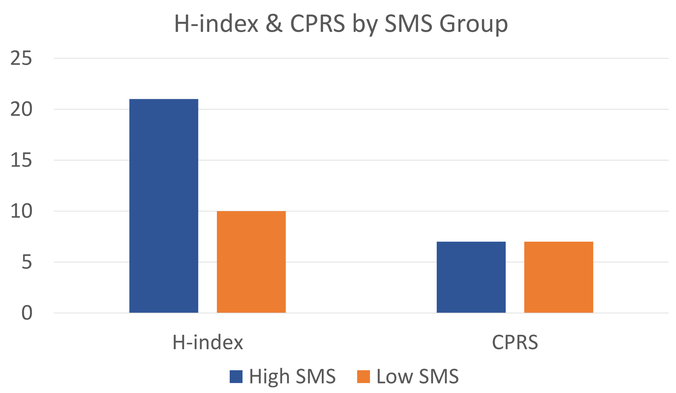


Figure 3. H-index and CPRS by Social Media Score

Discussion

- Surgeons in the higher SMS group had a substantially higher median h-index (21 vs. 10), but composite patient rating scores were similar between groups
- This may suggest online presence reflects scholarly engagement more than the patient-facing experience captured by review platforms
- High social media surgeons had more years since fellowship (15 vs. 10) and the h-index itself accrues with career length, however, the independent association of social media score with h-index after adjusting for experience and practice type argues the relationship is not solely explained by seniority
- Positive associations between social media activity and bibliometric output have been reported in other specialties, including orthopedic and plastic surgery
- In head and neck oncologic surgery, robust social media presence correlates with stronger academic impact, but not with online patient ratings

Conclusions

- Among AHNS head and neck cancer surgeons, greater social media presence is independently associated with higher academic productivity (h-index), even after adjusting for years since and practice type
- A stronger social media presence was not associated with better patient ratings
- For academically oriented surgeons, cultivating a professional social media presence may complement traditional scholarly output and amplify the visibility of their work
- Longitudinal and causal studies could help determine whether social media engagement drives academic impact or simply reflects the profiles of already-productive, more senior surgeons

Contact

Naveen Raj
Northeast Ohio Medical University
4209 OH-44 Rootstown, OH 44272
nraj@neomed.edu
224-704-2732

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