

INTRODUCTION

- The rapid growth of social media (SM) over the past decade has impacted almost every aspect of our lives
- Social media use by American adults rapidly increased from 5% in 2005 to 72% in 2021 (1)
- SM can be utilized as a means of communication, education, and branding, and, more recently, has an increasing presence in medical professional recruitment
- Apps such as Twitter and Instagram allowed anesthesiology departments the opportunity to highlight their accomplishments directly to the public
- Fellowship programs have begun to use these apps to market their program for recruitment purposes
- This study evaluated the presence of obstetric anesthesiology (OB-A) fellowship programs on Twitter and Instagram
- Hypothesis: a more active account would have greater public engagement and a greater amount of followers

METHODS

- Mount Sinai Institutional Review Board exempt
- The institution and number of fellows per year of all ACGME-accredited OB-A fellowship programs were retrieved from the SOAP website
- Accounts were identified by searching each program's website for profile links and by direct query on both platforms
- Residency program-only accounts were excluded
- Study period: July 1, 2020 to June 31, 2021
- For all SM accounts identified, the number of posts and followers were recorded
- Each post was categorized as the following:
 - Medical Education (intent to instruct house staff, faculty, or the community at large)
 - Branding (promotion of departmental recognition/achievements)
 - Social (social activities both in the professional and out-of-hospital environments).
- We tested normality using the Shapiro-Wilk test, Data were expressed as median (interquartile range, IQR) or Odds Ratio (95% confidence interval)
- A two-sided P value less than 0.05 was considered significant. All analyses were performed using R v. 4.1.2 (<https://www.R-project.org/>)



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Social Media Presence of Obstetric Anesthesiology Fellowship Programs

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ACGME-accredited Obstetric Anesthesia Fellowship	# of Fellows	Fellowship Twitter	Fellowship Twitter Followers	Department Twitter	Department Twitter Followers	Fellowship Instagram	Fellowship Instagram Followers	Department Instagram	Department Instagram Followers
University of Alabama at Birmingham	1	X	10	X	2730	X	380	X	1412
Cedars-Sinai Medical Center	4	-	-	-	-	-	-	-	-
Stanford University	3	X	1497	X	5457	X	12	X	2860
University of California San Francisco	2	-	-	X	1988	-	-	-	-
University of Colorado School of Medicine	1	-	-	-	-	-	-	-	-
University of Miami	1	-	-	X	70	-	-	X	1548
Emory University	1	-	-	-	-	-	-	-	-
Northwestern University Feinberg School of Medicine	4	X	558	X	473	X	289	X	1316
The University of Chicago Pritzker School of Medicine	1	-	-	X	865	-	-	X	1549
University of Illinois Chicago	1	-	-	X	133	-	-	X	893
Ochsner Clinic Foundation	1	-	-	X	164	-	-	X	721
University of Maryland Medical Center	1	-	-	X	92	-	-	X	444
Johns Hopkins University	1	-	-	X	720	-	-	X	1159
Beth Israel Deaconess Medical Center Program	1	-	-	X	1224	-	-	X	1307
Brigham and Women's Hospital	5	X	1601	X	1194	-	-	X	3327
Massachusetts General Hospital	1	-	-	X	869	-	-	X	3254
University of Michigan Health System	1	X	117	X	749	-	-	X	1022
Mayo Clinic	1	-	-	X	4206	-	-	-	-
Washington University in St. Louis	1	-	-	X	453	-	-	-	-
Icahn School of Medicine at Mount Sinai	2	-	-	X	87	-	-	X	2096
Columbia University (NY Pres)	3	X	692	X	241	X	114	X	1380
Montefiore Medical Center	1	-	-	X	154	-	-	X	149
Weill Cornell Medical College (NY Pres)	1	-	-	X	594	-	-	-	-
New York University School of Medicine	1	-	-	-	-	-	-	-	-
Mount Sinai West	1	-	-	-	-	-	-	X	172
Duke University	2	-	-	X	10,800	-	-	-	-
University of North Carolina at Chapel Hill	1	X	670	X	3566	-	-	X	1212
Wake Forest University School of Medicine	2	-	-	X	742	-	-	X	445
Ohio State University	1	-	-	X	288	-	-	X	264
Cleveland Clinic	2	X	159	-	-	-	-	X	934
University of Cincinnati Medical Center	1	-	-	-	-	-	-	X	1002
Magee-Womens Hospital of UPMC	2	X	173	X	989	X	137	X	1148
Vanderbilt University Medical Center	2	-	-	X	2243	-	-	-	-
Baylor College of Medicine Program	1	-	-	X	614	-	-	-	-
University of Texas Medical Branch	1	X	68	X	754	-	-	X	1070
University of Texas Southwestern Medical School	1	-	-	X	121	-	-	-	-
University of Texas Health Science Center	2	-	-	X	149	-	-	X	1032
University of Washington	1	-	-	X	106	-	-	X	647
Medical College Of Wisconsin	1	-	-	X	187	-	-	X	397

RESULTS

- Of the 39 ACGME-accredited OB-A fellowship programs:
 - 4 (10.3%) had both Twitter and Instagram accounts
 - 6 (15.4%) had only Twitter
 - 29 (74.4%) had neither
- Social media presence by institution is shown in Table 1
- For every 1-fellow increase in the program, the odds of having a fellowship Twitter account (TWA) was estimated to increase by 2.6 times (OR 2.6, 95%CI:1.2, 7.3;p=0.021)
- Nine (90%) of the 10 programs with a TWA were considered active
- The median number of tweets and followers were 62 (IQR 23-78) and 365.5 (IQR 117-692), respectively
- For every 50-follower increase, the number of tweets increased by 3.9 (95%CI:1.4, 6.4;p=0.007).
- Only 2 out of the 4 programs with an Instagram account were active. The median number of posts and followers were 27.5 (IQR 17-38) and 213 (IQR 125.5-334.5), respectively.

Table 1. Characteristics and social media presence of anesthesia departments with ACGME-accredited obstetric anesthesia fellowships

DISCUSSION

- First cross-sectional study to analyze the use of the social media platforms Twitter and Instagram amongst ACGME-accredited OBA fellowship programs.
- Only 25% of these programs were using these platforms in the 2020-2021 academic year.
- Larger fellowship programs tend to have a greater number of followers.
- More programs had departmental accounts rather than a fellowship specific account.
- Why Twitter and Instagram? Decision based on the researchers' familiarity with the apps, the simplicity of posts that made it easier for analysis, as well as prior publications (3,4).
- Limitations:
 - Only two applications
 - Pew Research Center: YouTube and Facebook are the most widely used online platforms by adults in America (1)
 - Impact of social media on anesthesia resident recruitment in Mayo Clinic – despite 94.4% of applicants having a Facebook account, Doximity was the most commonly used platform to research anesthesia programs. Instagram was the next most used, followed by LinkedIn, and then Twitter (2).
 - Study time period was only one year.
 - Some programs had active pages prior to this time and then became inactive during our study.
- Active Twitter account has been shown to result in increased nephrology fellowship program fill rates (5).
- Hashtags have been well received by applicants. This is especially apparent during national conferences (6).
- Lack of OBA fellowship specific presence in social media is an opportunity for OBA programs to use to educate, recruit, and expand their influence in the goal of ultimately reducing maternal and neonatal mortality and morbidity.

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Tweets From All OB-Anesthesiology Fellowship Accounts

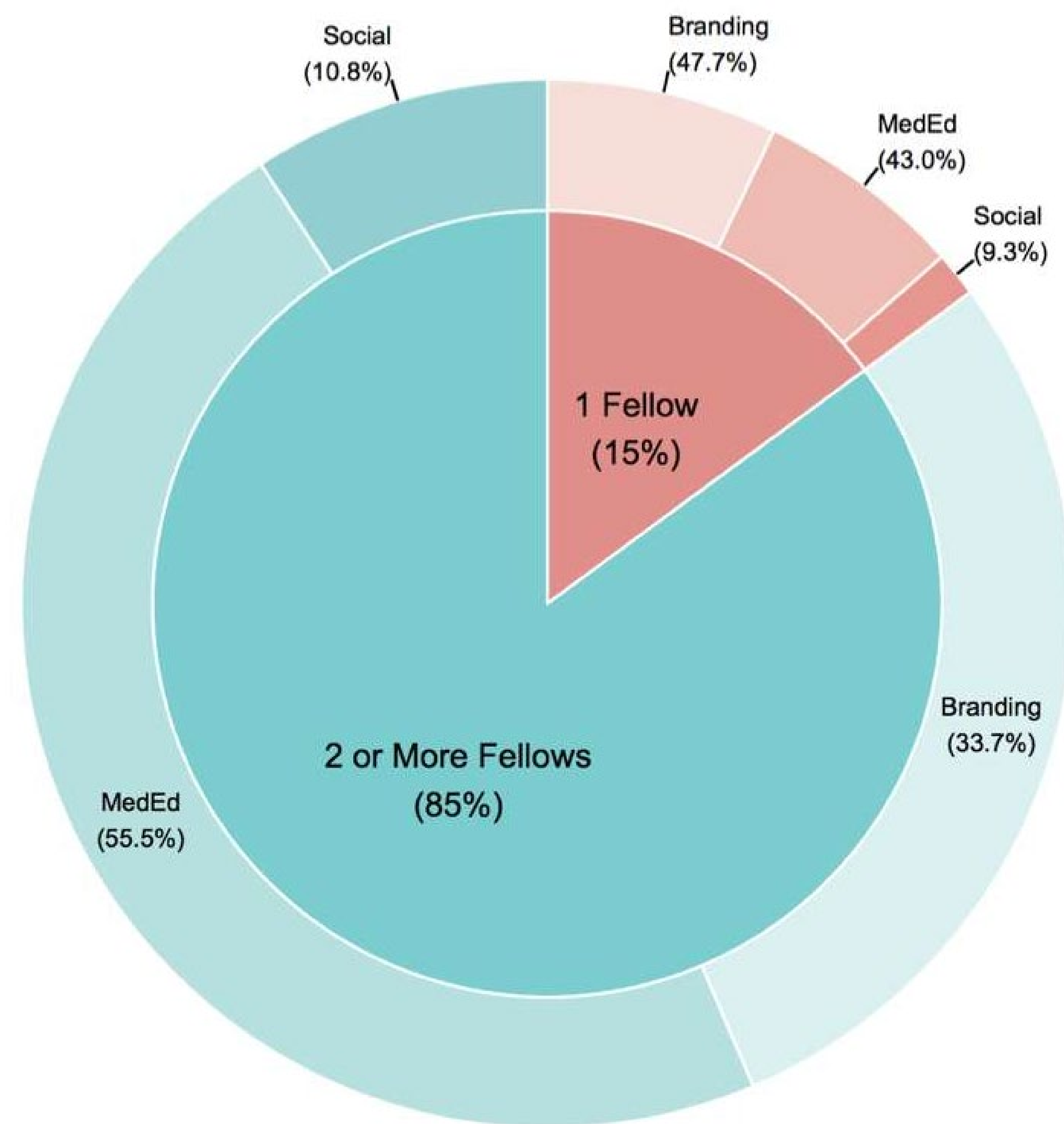


Figure 1: Distribution of tweets from active fellowship accounts by number of fellows. (Tweets from fellowship accounts divided by fellowship size and post category.)