



## 2024 NEW YORK REGIONAL SOCIETY OF PLASTIC SURGEONS ANNUAL RESIDENTS' NIGHT RESEARCH COMPETITION

MONDAY, MARCH 11, 2024  
NEW YORK ACADEMY OF MEDICINE

**ABSTRACT SUBMISSION TITLE:** *B4 - Assessing the Quality of Rhinoplasty Videos on YouTube: A Suitable Educational Tool for Aesthetic Surgery Trainees?*

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**Abstract Text:**

**PURPOSE:**

YouTube is a free, heavily utilized platform by residents and attending physicians for surgical education. The purpose of this study is to evaluate the quality of rhinoplasty surgical education videos on YouTube using a novel scoring technique: assessing the scope of video content against that of a gold standard textbook for plastic surgery education. This study seeks to increase objectivity and specificity of plastic surgery video quality assessments compared with traditional, generalized frameworks such as JAMA or DISCERN.

**METHODS:**

On August 5, 2023, the term "rhinoplasty surgical technique" was searched on YouTube. The first 100 results were sorted by relevance and evaluated against inclusion criteria consisting of surgical videos with the primary purpose of educating residents and/or attending physicians, English language, and narration/subtitle. Video and speaker characteristics were recorded. Videos were assessed on a 12-point scale based on subsections from Chapter 96 of "Essentials of Plastic Surgery" by Jeffrey E. Janis. This

scale was based on discussion of nasal anatomy, physiology, analysis, grafts, surgical approach, and surgical technique (nasal tip, nasal dorsum, osteotomy, nasal alae, nasal airway, deviated nose, and secondary rhinoplasty).

#### RESULTS:

22 unique videos met inclusion criteria. All identifiable video speakers were plastic surgeons and male. 7 (31.8%) of publishers were private, 12 (54.5%) were academic, and 3 (13.6%) were from a plastic surgery society. 18 videos were operative, 3 were lecture-style, and 1 was a combination of both. The average score on the 12-point scale for rhinoplasty videos was 5.05. Nasal anatomy, nasal analysis, and surgical approach were frequently covered topics, while nasal physiology and grafts were not (Table 1). For surgical technique, nasal tip and dorsum were the most commonly covered subjects, while osteotomy, nasal alae, nasal airway, deviated nose, and secondary rhinoplasty were mentioned in less than a quarter of videos. Videos that were  $\geq 20$  minutes long had the highest average view count ( $p=0.35$ ), like count ( $p=0.24$ ), and video score ( $p=0.22$ , Table 2), suggesting it may be beneficial for video creators to publish longer videos. Table 3 shows percentages of topics “discussed” vs “shown” in the videos.

#### CONCLUSIONS:

Rhinoplasty video resources are currently of low-to-moderate quality, so optimizing this content can benefit trainees. Future rhinoplasty videos should focus on including topics that this study found to be insufficiently covered. Creation of videos based on standard plastic surgery textbook structure would provide comprehensive, objective resources that more strongly correlate with the curriculum of a plastic surgery resident.

#### Tables:

Length Category	Average Views	Average Likes	Average Score
Overall	149,430	1,384	5
0-10	135,960	807	5
10-20	148,274	1,987	4
20-30	182,915	2,164	6

Table 1: Average view count, like count, and video score stratified by video length.



	Percentage of Videos Covering Topic			
	Overall	0-10 minutes	10-20 minutes	20+ minutes
Nasal anatomy	81.8%	100.0%	40.0%	80.0%
Physiology	4.5%	0.0%	20.0%	0.0%
Analysis	95.5%	91.7%	100.0%	100.0%
Grafts	45.5%	41.7%	60.0%	40.0%
Surgical approach	59.1%	75.0%	20.0%	60.0%
Surgical Technique	86.4%	91.7%	60.0%	100.0%
Nasal tip	52.6%	45.5%	25.0%	100.0%
Nasal dorsum	73.7%	63.6%	75.0%	100.0%
Osteotomy	21.1%	27.3%	25.0%	0.0%
Nasal Alae	21.1%	27.3%	0.0%	25.0%
Nasal airway	26.3%	27.3%	0.0%	50.0%
Deviated nose	26.3%	0.0%	50.0%	75.0%
Secondary rhinoplasty	31.6%	0.0%	50.0%	75.0%

Table 2: Breakdown of topic coverage among rhinoplasty education videos

	Percentage discussed	Percentage shown
Nasal anatomy	22%	78%
Physiology	100%	0%
Analysis	5%	95%
Grafts	50%	50%
Surgical approach	54%	46%
Nasal tip	30%	70%
Nasal dorsum	36%	64%
Osteotomy	50%	50%
Nasal Alae	50%	50%
Nasal airway	40%	60%
Deviated nose	60%	40%
Secondary rhinoplasty	100%	0%

Table 3: Percentages of topics discussed versus shown in rhinoplasty education videos