

Quality of Spine Surgery Information on Social Media: A DISCERN Analysis of TikTok Videos

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INTRODUCTION

- The use of social media applications to disseminate information has substantially risen in recent decades.
- Spine and back pain-related hashtags have garnered several billion views on TikTok and have become increasingly influential.
- Objective: We aim to assess the quality of spine surgery content TikTok from providers and patients.



METHODS

- Study Design:** A cross sectional review of Spine Surgery videos on TikTok
- Inclusion Criteria:** Top 50 videos generated by the Tik Tok algorithm for the following 3 hashtags:

#SpinalDecompression

#ScoliosisSurgery

#SpinalFusion

- Exclusion Criteria:** Videos were excluded if they had less than 1,000 views, were duplicates, non-English language, and if they lacked audio or visual content.
- Outcomes:**
 - Quality of Video as measured by the DISCERN tool.
 - Video metadata and descriptive information regarding video creators

Question #	DISCERN question
Q1	Have explicit aims
Q2	Achieve its aims
Q3	Be relevant to consumers
Q4	Make sources of information explicit
Q5	Make date of information explicit
Q6	Be balanced and unbiased
Q7	List additional sources of information
Q8	Refer to areas of uncertainty
Q9	Describe how treatment works
Q10	Describe the benefits of treatment
Q11	Describe the risks of treatment
Q12	Describe what would happen without treatment
Q13	Describe the effects of treatment choices on overall quality of life
Q14	Make it clear there may be more than one possible treatment choice
Q15	Provide support for shared decision-making

CONCLUSIONS

- This sample of 3 spine surgery hashtags (“#spinalfusion,” “#scoliosisurgery,” and “#spinaldecompression”) have collectively garnered over 100 million views representing an active and growing body of spine surgery related information on TikTok.
- As rated by the DISCERN score, these videos were of very poor quality.
- Spine care providers should be aware that patients are utilizing TikTok as a source of medical information. Patients using TikTok to obtain spine-related information should be aware of the varied quality of videos and seek to verify all information by consulting with their healthcare providers.
- Future studies analyzing social media’s impact on patient treatment, outcomes, and clinical care would be of great interest.

RESULTS

- The 3 hashtags utilized, totaled 106.3 million views
- The average DISCERN score was 24.4, ranging from 15 to 46.5.
- Two videos (1.3%) fell within the “fair quality” bucket, 35 (23.3%) fell within the poor-quality bucket, and a majority, 113 (75.3%) fell within the very poor-quality bucket.

Variable	#SpinalFusion	#SpinalDecompression	#ScoliosisSurgery	p-value
No. of videos	50	50	50	-
Popularity (views/day)	5,859 ± 15,240	2,490 ± 9,264	6,056 ± 25,087	0.53
Likes	92,153 ± 166,309 ^a	3,843 ± 11,723 ^a	62,945 ± 221,693	0.02
Comments	1,053 ± 1,917 ^{ab}	33 ± 41 ^b	355 ± 741 ^a	<0.001
DISCERN	24 ± 3.8 ^b	27 ± 5.1 ^{ab}	22 ± 4.7 ^a	<0.001
Video length (sec)	44 ± 46 ^a	47 ± 37 ^b	22 ± 17 ^{ab}	<0.001
Content category				<0.001
Educational	4 (8)	45 (90)	8 (16)	
Patient experience	39 (78)	4 (8)	38 (76)	
Entertainment	7 (14)	1 (2)	4 (8)	
Creator type				<0.001
MSK provider	4 (8)	31 (62)	3 (6)	
Layperson	46 (92)	19 (38)	47 (94)	

- Fewer videos were created by MSK professionals than laypersons (38 vs. 112)
- However, the DISCERN score for MSK-created videos were significantly higher than those created by laypersons

Variable	MSK provider (n = 38)	Layperson (n = 112)	p-value
Popularity (views/day)	3,914.14 ± 10,776	5,103 ± 19,565	0.72
Likes	17,387 ± 41,097	65,057 ± 186,134	0.12
Comments	220 ± 592	569 ± 1,401	0.14
Video length (sec)	52 ± 38.3	32.5 ± 34.9	0.004
DISCERN	27.7 ± 5.8	23.3 ± 4	<0.001