Readability of Online Materials for Rhinoplasty

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INTRODUCTION: Rhinoplasty is a popular aesthetic and reconstructive surgical procedure, and it is one of the top five surgical cosmetic procedures performed worldwide. However, little is known about the content and readability of online materials for patient education. Patients are predominantly using online materials to gather information on healthcare. While there is a plethora of patient material available, the appropriateness of content readability is not known. The recommended grade level for educational materials is seventh to eighth grade according to the National Institutes of Health (NIH). This study aims to assess the readability of online patient resources for rhinoplasty.

MATERIALS AND METHODS: The largest public search engine, Google, was queried using the term "rhinoplasty" on February 26, 2016. Location filters were disabled and sponsored results excluded to avoid any inadvertent search bias. The 10 most popular websites were identified and all relevant, patient-directed information within one click from the original site was downloaded and saved as plain text. Readability was analyzed using five established analyses (Readability-score.com, Added Bytes, Ltd., Sussex, UK).

RESULTS: Analysis of ten websites demonstrates an average grade level of at least twelfth grade. No material was at the recommended seventh to eighth grade reading level (Flesch-Kincaid, 11.1; Gunning-Fog, 14.1; Coleman-Liau, 14.5; SMOG 10.4; Automated Readability, 10.7; Average Grade Level, 12.2). Overall Flesch Reading Ease Index was 43.5, which is rated as "difficult." No site was at the recommended reading level.

CONCLUSION: Online materials available for rhinoplasty exceed NIH-recommended reading levels, which may prevent appropriate decision-making in patients considering these types of surgery. Similar projects assessing other plastic surgery procedures found grade level above 7th or 8th grade. Outcomes of this study identify that Plastic Surgeons should be cognizant of available online patient materials and make efforts to develop and provide more appropriate materials. Readability results can also contribute to marketing strategy and attracting a more widespread interest in the procedure.

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