

Bullous Pemphigoid: Readability and Quality of Online Health Resources

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OBJECTIVE.

Assess the readability and quality of online resources on Bullous Pemphigoid (BP).

TAKEAWAY.

Online patient health resources for BP fail to meet recommended reading levels. There is a need for improved readability and quality of online BP resources to improve patients' access to health information. Dermatologists should take an active role in vetting online resources for their patients and prioritize readability and accessibility when contributing to online content.

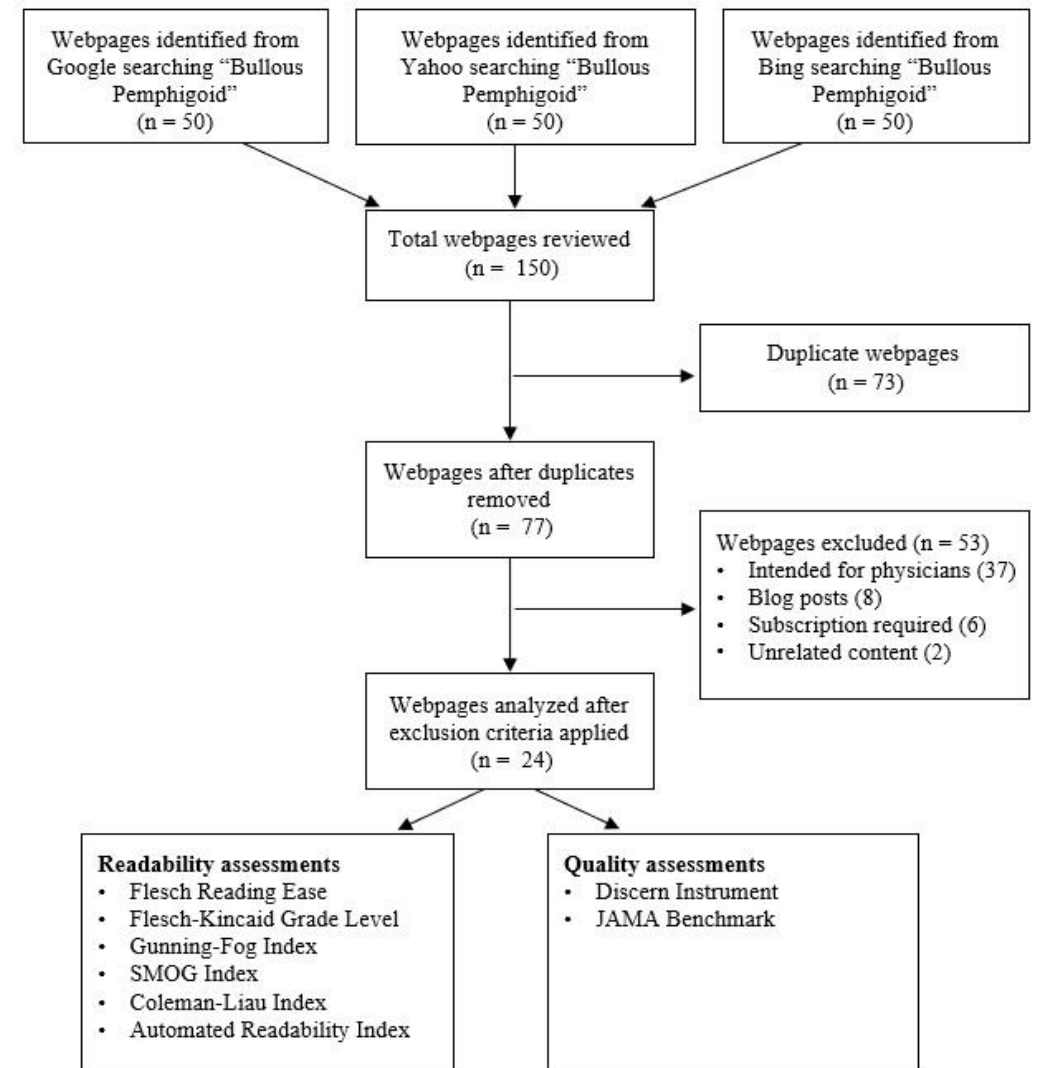
Conflict of Interest: JLH has served as an advisor for Novartis. VYS is a stock shareholder of Learn Health, and has served as an advisor, investigator and/or speaker for Sanofi Genzyme, Regeneron, AbbVie, Burt's Bees, Dermira, Eli Lilly, Novartis, Pfizer, Galderma, Leo Pharma, SUN Pharma, Menlo Therapeutics, GpSkin, and Skin Actives Scientific. TS and NV report no conflicts of interest.

Background/Aims

- Bullous pemphigoid (BP) commonly affects the elderly¹, a population in which health literacy is a barrier to health outcomes.
- In a 2003 national survey, only 3% of patients older than 65 had “proficient” health literacy².
- AMA recommends patient material to be \leq 6th grade level.
- There is increased utilization of internet for health information³, but the accessibility of online BP resources and the impact of dermatologists’ authorship on readability and quality is unknown.
- The goal of this study is to examine the readability and quality of online BP health information and examine if there is a difference between resources authored by dermatologists versus non-dermatologists.

Methods

- “Bullous pemphigoid” was searched on Google, Yahoo, and Bing. The first 50 results from each site were evaluated.
- Readability was assessed using six validated readability scales.
- Quality was assessed with the JAMA Benchmark and Discern Instrument⁴.
- Differences in average readability and Discern score of articles authored by dermatologists compared to those by non-dermatologists were assessed using a two-sample t test.



Results

- Of 150 websites reviewed, 24 met inclusion criteria.
- Websites with the most accessible readability grade level were Saint Luke's (6.7) and WebMD (8.9).
- Websites with the highest readability grade level were DermNet NZ (15.3) and Wikipedia (15.2).

Top searched bullous pemphigoid educational websites and average readability level (N=24)

Website Name	Average readability grade level^
Saint Luke's	6.7
WebMD	8.9
Cleveland Clinic	9.0
Patient Info	9.8
Journal of the American Medical Association	10.0
Penn Medicine	10.9
American Osteopathic College of Dermatology	11.1
Medline Plus	11.1
Mount Sinai	11.1
NHS UK	11.1
Mayo Clinic	11.4
Rare Diseases NIH	11.5
Healthline	11.8
Winchester Hospital	11.9
Dermcoll	12.6
Healthprep	12.7
National Organization for Rare Disorders	13.2
MedicineNet	13.3
Cleveland Clinic Med	13.4
Pemphigus.org	13.9
Merck Manual Consumer	14.0
Medical Point	14.9
Wikipedia	15.2
DermNet NZ	15.3

Results

- The average readability grade level of BP online resources was 11.9.
- The majority (21/24) were rated as “fair” or less than “fair” using the Discern Instrument.
- Only a third met all 4 criteria of the JAMA Benchmark.
- In comparing articles written by dermatologists versus non-dermatologists, there was no significant difference in average readability grade level (12 vs 12, $p=0.87$) or quality of content per Discern score (41 vs 40, $p=0.88$).

Conclusions

- Online patient health resources for BP fail to meet recommended reading levels, and the quality of written content is variable.
- BP disproportionately affects the elderly, a population identified to have limited health literacy.
- Low health literacy negatively correlates with the ability to evaluate online health information⁵.
- Improvement of readability and quality of online patient health resources on BP may improve patient outcomes.
- Dermatologists should take an active role in vetting online resources for their patients and when contributing to online content, should prioritize readability and accessibility.

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