

A Call for Clarity: Misleading Hearing Aid Marketing on Amazon.com

Examining accuracy, readability, and the need for regulation in Amazon.com hearing aid listings

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Scan for published study

BACKGROUND

- Hearing loss is one of the most common chronic health conditions in the world (1)
- Only 1 in 4 patients with mild-to-moderate hearing loss have hearing aids (2)
- In 2017, Congress passed Over-The-Counter (OTC) Hearing Aid Act to make hearing aids available for purchase without specialty visits
- OTC Hearing aids only intended for those with mild-to-moderate hearing loss (nothing more severe)
- Certain types of OTC hearing aids can go through additional testing to advertise as “FDA cleared” or “FDA registered”
- While FDA mandates certain information be printed on hearing aid boxes, there is no such mandate for online listings/advertisements

OBJECTIVES

- Characterize over-the-counter (OTC) hearing aid listings on Amazon.com
- Assess cost, consumer ratings, review volume, and product description readability
- Verify FDA clearance or registration status of OTC hearing aid listings
- Evaluate marketing claims related to degree of hearing loss (mild-to-moderate vs beyond)

METHODOLOGY

- Cross-sectional, descriptive study
- Analyzed 138 Amazon OTC hearing aid listings from term “OTC Hearing Aids”
- Listing characteristics were extracted into spreadsheet
- FDA clearance or registration was verified via online database
- Analysis included descriptive data on listing characteristics and nonparametric analysis of key variables: price, FDA-clearance status, device type, and form factor
- Readability indices were used to assess the accessibility of product descriptions

RESULTS

Significant Key Variable Associations

Variable 1	Variable 2	P-value*
Price	FDA Clearance	$p < 0.001$
Price	Device Type	$p < 0.001$
Price	Form Factor	$p = 0.004$
Reviews	Form Factor	$p = 0.020$

Figure 1: Nonparametric analysis conducted amongst 4 key variables: price, FDA-clearance status, device type (preset vs self-fitting) and form factor (in the ear vs behind the ear). A more expensive price was statistically significantly correlated with verified FDA cleared devices, self-fitting devices, and behind-the-ear models. Reviews were positively correlated with device form factor.
*p value of < 0.05 was considered to be statistically significant

Advertised Claims of FDA Clearance/Approval

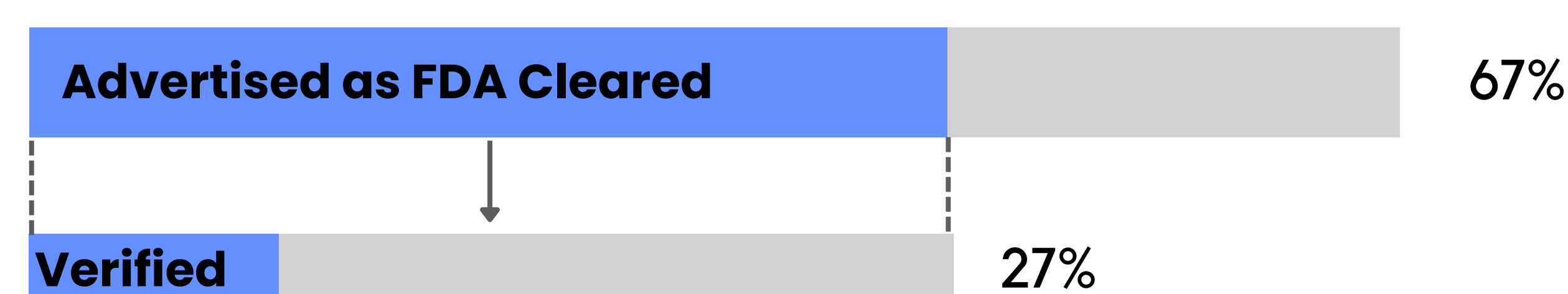


Figure 2: 92 listings (66.7%) claimed to be FDA cleared/approved, however only 37 of those listings (26.8%) could be verified

LIMITATIONS

- Small-scale analysis (only 138 listings) on single platform, may not be representative of all listings on all platforms
- Use of guest browser minimized personalization, but most shoppers will have their own targeting/cookies
- **High turnover rate** of Amazon listings
 - 52 listings deleted by end of study
 - Some listings deleted before all information could be extracted
- Determining FDA clearance/registration status was challenging, may not be up to date

Advertised Degree of Hearing Loss

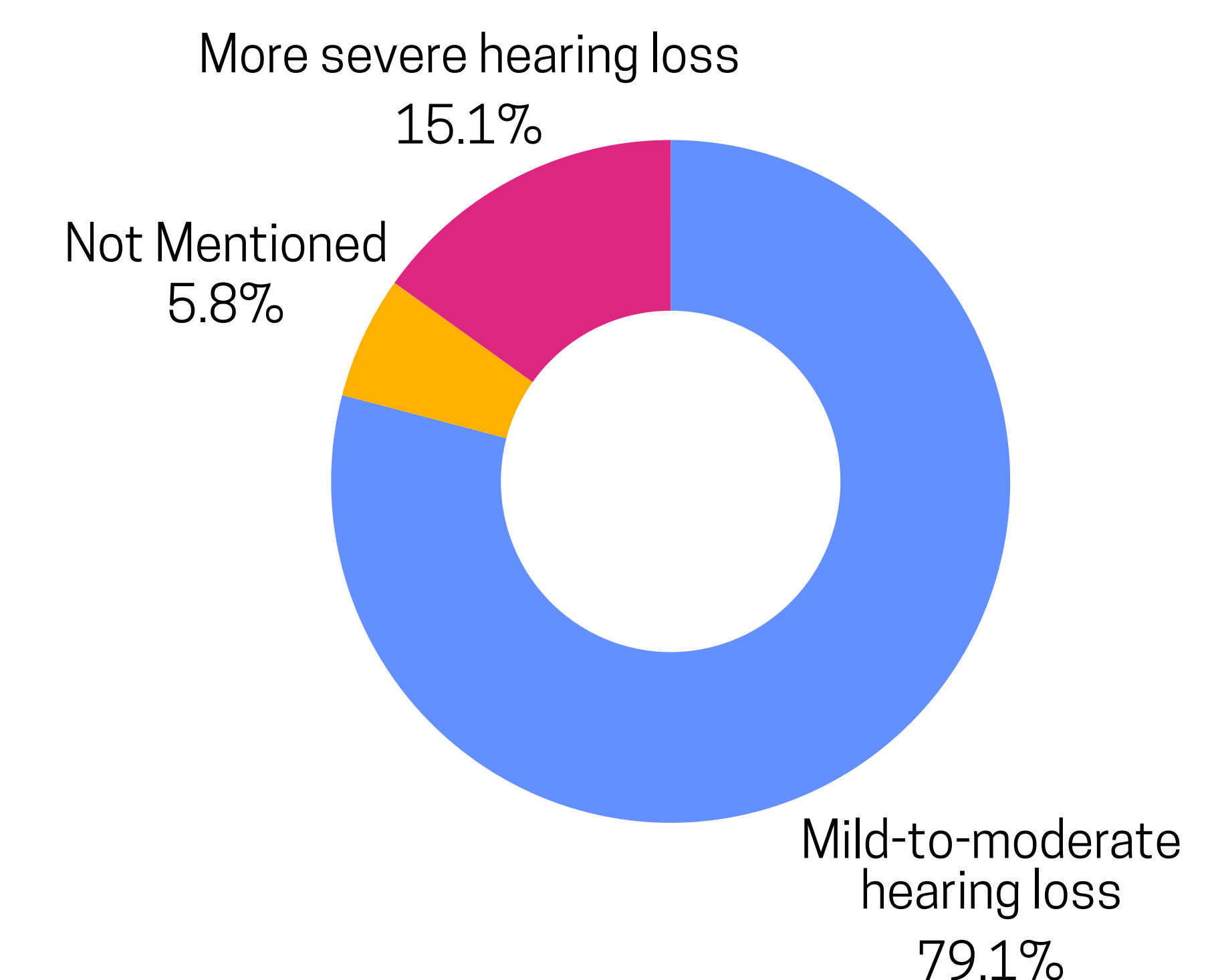


Figure 3: Most listings (68) appropriately specified their hearing aids are for those with mild-to-moderate hearing loss, however over 20% of listings (18) did not mention this important requirement, and 15% of listings (13) inappropriately claimed they could treat more severe levels of hearing loss

CONCLUSIONS

- Hearing aid listings on Amazon.com were found to have...
 - **Misleading claims** to be **FDA approved/verified**
 - **Missing product details**
 - Advertising to **advanced hearing loss**
 - **High turnover rates** of listings
- Future Opportunities:
 - **Regulate terminology** included in online listings
 - **Mechanism for enforcement** or reporting of false claims
 - **Devise new standards** to provide clearer and more accessible information on listings

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DISCLOSURES

V.M. and A.S. have funding from National Institutes of Health (NIH) and the Demant Foundation for OTC hearing aid research. A.S. has funding from Advanced Bionics Corporation for cochlear implant research. V.M. serves as scientific advisor for hearX Group (Pty) Ltd. D.W.S. has a relationship with the hearX Group (Pty) Ltd that includes equity, consulting, and potential royalties. The remaining authors disclose no conflicts of interest.