

# Perception of wig use in patients with hair loss

Madison K Cook<sup>1</sup> BS, Jorge Larrondo<sup>1</sup> MD MSc, Steven R Feldman<sup>1-4</sup> MD PhD, Amy J McMichael<sup>1</sup> MD

Affiliations: <sup>1</sup>Center for Dermatology Research, Department of Dermatology, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA, <sup>2</sup>Department of Pathology, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA, <sup>3</sup>Department of Social Sciences & Health Policy, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA, <sup>4</sup>Department of Dermatology, University of Southern Denmark, Odense, Denmark

Corresponding Author: Steven R Feldman, Department of Dermatology, Wake Forest School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1071, Tel:336-716-3926, Email: [sfeldman@wakehealth.edu](mailto:sfeldman@wakehealth.edu)

*Keywords: alopecia, hair loss, quality of life, wig use*

To the Editor:

Alopecia has a negative effect on patients' quality of life and is a large psychosocial burden [1]. Wig use can have a positive impact on patients' lives as it is associated with identity restoration, improvement in self-esteem, and enhancement of interpersonal relationships [2]. We have created a survey to assess individuals' perceptions of wig use, including barriers to use, past experiences with wig use, and knowledge regarding wigs to further describe the value of wigs in reducing the psychosocial burden of disease for patients with alopecia. In addition, we address gaps in knowledge regarding wig use that could be improved with physician-patient education.

A total of 552 subjects  $\geq 18$  years old from the United States were recruited through an online crowdsourcing platform, Amazon Mechanical Turk (Amazon, Seattle, WA). This study qualified for IRB exemption. A fact sheet was made available and subject consent was assumed by subject's participation in the study. Patients completed a survey including both multiple choice and write-in responses regarding wig use via Qualtrics (Provo, UT). Attention check questions were incorporated in the survey to identify inattentive responders. Responses from participants that did not have a current or past history of alopecia and failed the attention checks were excluded from data analysis.

Of the 552 subjects recruited, 508 completed the survey (92.0% completion rate). Of the 508 subjects,

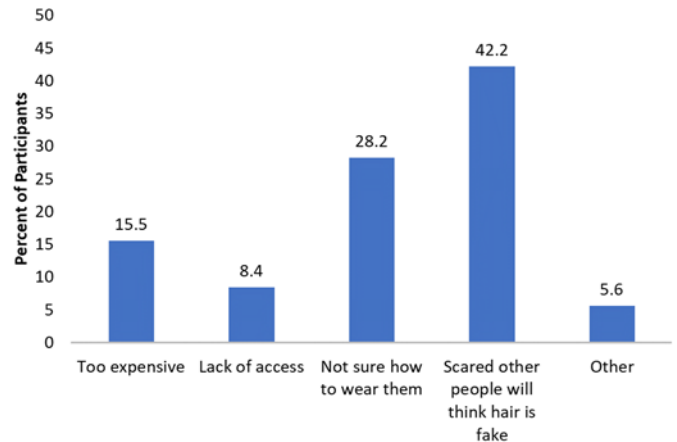
184 had a current or previous history of alopecia (**Table 1**). The majority (N=113/184, 61.4%) had worn a wig before and 71/184 (38.6%) had not worn a wig previously. Most participants believed wigs had a positive influence on their self-confidence, mental health, and social life (93.8%, 88.5% and 92.0%, respectively). The three most-common reasons for disliking wigs were that they were "too hot," had a "poor fit," or were "too expensive." Many participants (N=78/113, 69.0%) believed that other people could tell when they were wearing a wig and 70.0% were concerned by this belief. Of the participants who had never worn a wig before, 42.2% attributed their reason for never wearing a wig to their fear of others thinking their hair is fake, whereas 28.2% attributed their reason to not knowing how to wear one (**Figure 1**). Of the non-wig users, 62%, 64.8%, and 62.0% did not know where to access wigs, how much they cost, or about the different types of wigs available; 56.3% selected they would be more likely to wear a wig if they had more education regarding their use. The majority of participants (72.3%), both with and without past wig use experience, desired to know more about wigs, including how to maintain them, how to wear them, and what side effects could occur, such as overheating or damage to their natural hair. Although the majority (N=119/184, 64.7%) of participants were comfortable discussing wig use with their providers, only 46.2% had discussed the topic previously with their physician.

Wigs are utilized in the management of both scarring and nonscarring alopecias and can improve patients'

**Table 1.** Demographics of respondents.

Characteristic	Number (%) of participants (N=184)
Average age	38.9
<b>Gender</b>	
Female	101 (54.9%)
Male	81 (44.0%)
<b>Race or ethnic background</b>	
White	155 (84.2%)
Black or African American	13 (7.1%)
Hispanic	8 (4.3%)
American Indian or Alaskan Native	3 (1.6%)
Asian	4 (2.2%)
Native Hawaiian and other Pacific Islander	0 (0.0%)
Other race	0 (0.0%)
Prefer Not to Say	1 (0.5%)
<b>Highest level of education</b>	
Less than or some high school	0
High School/GED	9 (4.9%)
Associate degree/some college	12 (6.5%)
Bachelor's degree	137 (74.4%)
Graduate school	26 (14.1%)
<b>Living environment</b>	
Urban	107 (58.1%)
Suburban	45 (24.4%)
Rural	32 (17.4%)
<b>Household income</b>	
Less than \$20,000	10 (5.4%)
\$20,000-\$49,999	66 (35.9%)
\$50,000-\$99,999	76 (41.3%)
\$100,000-\$149,999	26 (14.1%)
\$150,000-\$199,999	3 (1.6%)
Greater than \$200,000	3 (1.6%)
<b>Health insurance</b>	
Medicare	95 (51.6%)
Medicaid	36 (19.6%)
Private/commercial	43 (23.4%)
Veterans Affairs (VA)	0 (0%)
None	7 (3.8%)
Other	3 (1.6%)

overall quality of life [3]. Although wigs can be used as a positive coping mechanism for patients with alopecia, they also have the potential to add to the psychosocial burden of hair loss, with many participants in our study fearing others' perceptions of their hair as being fake [4]. The process of selecting, wearing, and maintaining a wig is complex and individuals may be unfamiliar or feel overwhelmed by all of these factors, as reflected in



**Figure 1.** Reasons why participants had never worn a wig.

our cohort. Our findings support the need to address patients' questions on wig use, barriers to use such as expense or accessibility, and the potential emotional impact of wig use. Referrals to wig specialists may also be beneficial for patients in managing their alopecia.

### Potential conflicts of interest

Dr. Steven Feldman has received research, speaking and/or consulting support from a variety of companies including Galderma, GSK/Stiefel, Ammirall, Leo Pharma, Baxter, Boeringer Ingelheim, Mylan, Celgene, Pfizer, Valeant, Taro, Abbvie, Cosmederm, Anacor, Astellas, Janssen, Lilly, Merck, Merz, Novartis, Regeneron, Sanofi, Novan, Parion, Qurient, National Biological Corporation, Caremark, Advance Medical, Sun Pharma, Suncare Research, Informa, UpToDate and National Psoriasis Foundation. He is founder and majority owner of [www.DrScore.com](http://www.DrScore.com) and founder and part owner of Causa Research, a company dedicated to enhancing patients' adherence to treatment. Dr. Amy McMichael has received research grants, royalties, and/or consulting support from a variety of companies, including Allergan; Ammirall; Arcuits; Bioniz; Cassiopea; Concert Pharmaceuticals; Covance; eResearch Technology, Inc; Galderma; Incyte; Informa Healthcare; Johnson & Johnson; Keranetics; Lilly; Merck & Co, Inc; Pfizer; Proctor & Gamble; Revian; Samumed; and UpToDate. Madison K. Cook and Jorge Larrondo declare no conflicts of interest.

## References

1. Davis DS, Callender VD. Review of quality of life studies in women with alopecia. *Int J Womens Dermatol*. 2018;4:18-22. [PMID: 29872671].
2. Zannini L, Verderame F, Cucchiara G, et al. "My wig has been my journey's companion": perceived effects of an aesthetic care programme for Italian women suffering from chemotherapy-induced alopecia. *Eur J Cancer Care*. 2012;21:650-660. [PMID: 22339814].
3. Saed S, Ibrahim O, Bergfeld WF. Hair camouflage: a comprehensive review. *Int J Womens Dermatol*. 2016;2:122. [PMID: 28492045].
4. Park J, Kim DW, Park SK, Yun SK, Kim HU. Role of hair prostheses (wigs) in patients with severe alopecia areata. *Ann Dermatol*. 2018;30:505. [PMID: 30065604].