Hair, ageing and quality of life for women of African descent living in the UK

Daniels, Gabriela, Hur, Young-Jin, Khadaroo, Ameerah, Searing, Caroline, Zeilig, Hannah

[1] London College of Fashion, University of the Arts, London, UK

* Gabriela Daniels, London College of Fashion
20, John Princes Street, London, W1G 0BJ, g.n.daniels@fashion.arts.ac.uk

Abstract

The curliest hair is associated with people of African descent and, historically, scientific studies have referred to such hair as African. African hair has been reported to have more knotting and a higher percentage of naturally broken fibers as well as lower mechanical strength than other types of hair. This study explored the age-related changes to hair management and styling techniques and related measures of satisfaction and quality of life (QoL) of women of African and Afro-Caribbean descent of age over 60 living in the UK. An online survey, including a QoL questionnaire was conducted (n=46). 86.9% of the survey participants were between 60 and 69 years old, whilst the remaining group were between 70 and 80 years old. All identified their natural hair as curl type 6,7,8, with curl type 6 being most common n=16. 78% reported completely natural hair (shorter than 10cm=21; longer than 10cm=15). A preference towards natural styles past menopause was demonstrated with hair length, texture and colour being associated with positive attitudes. However, the perception of decreased hair manageability could be related to the requirement to complete more haircare and hairstyling tasks at home and more frequently than if the hair was subjected to long-lasting styling techniques such as relaxing or weaving. Overall, these changes to appearance, styling and personal effort increased satisfaction with hair but had no impact on the quality of life of the participants.

Keywords: Hair ageing; textured hair; quality of life; hair manageability

Background

From a scientific point of view, the amino acid composition of the hair of individuals from different geo racial groups is considered almost identical [1,2,3,4]. However, there is a range of observed and measurable differences in the geometric, mechanical and sensory characteristics of hair representing these groups, as well as within the groups. Key differences such as the degree of curl, cross sectional fiber size and ellipticity, break strength and lustre are attributed to micro-level differences in the cellular structure of the hair's main morphological components: cuticle and cortex [5,6,7]. The most curly/kinky hair is associated with people of African descent. Historically, scientific studies have referred to such hair as African (whilst Caucasian and Asian hair describe broadly the hair of people of European and East Asian descent).

African hair has been reported to have more knotting and a higher percentage of naturally broken fibers [8] as well as lower mechanical strength than other types of hair [3,9]. A perception and/or concern with significant hair breakage by otherwise healthy individuals has also been reported by several studies [10,11,12,13] hence scientific observations appear to be corroborated by personal experiences. In addition to this fragility, some styling practices such as relaxing and braiding have been reported to cause structural damage to the hair [14,15,16], dermatosis, temporary or permanent loss of hair [17,18,19].

Further challenges to maintaining hair appear with age notably due to hair greying [20,21] but also due to ageing of the scalp skin [22]. It has been found that ageing of Caucasian and Asian hair leads to a reduction in hair diameter and a reduction in hair stiffness and mechanical strength [23]. Studies have found that ageing of hair limits the choice of hair styles [24], but women would still consider styles appearing less old to avoid being treated as such [25].

To the authors' knowledge, no studies have been published on hair ageing in women of African or Afro-Caribbean descent. This study explores the age-related changes in hair management and styling techniques and related measures of satisfaction and quality of life (QoL) of women of African and Afro-Caribbean descent of the age over 60 living in the UK.

Methods

An online survey, including a QoL questionnaire was conducted using Qualtrics software (Qualtrics XM, USA). Various analyses were conducted using SPSS (version 28.0.0.0) (IBM, USA).

Results and Discussion

The survey was open from July to December 2021 and returned 46 valid responses. 86.9% of the survey participants were between 60 and 69 years old and 76% identified themselves as African, Caribbean or Black British, whilst the rest were of a more complex mixed background. All identified their natural hair as curl types 6,7 or 8 [26], with curl type 6 being the most common (35%). 78% reported completely natural hair (shorter than 10cm=21, longer than 10cm=15) and 65% reported their natural hair colour to have low intensity grey, whilst 32% reported high intensity of grey hair. 70% of the respondents were in some form of employment or self-employed, the remaining were in full or partial retirement or unemployed. All participants had sought medical help in relation to their hair and scalp at least once in their lives, 13% twice or more.

Currently, the participants were less likely to relax, braid or weave their hair and to use extensions than pre menopause. These findings could be viewed as a shift away from styling practices that are likely to cause substantial stress to the scalp and hair. As the literature shows that a perception of hair fragility amongst women with highly curly hair is not uncommon, the participants could be seeking ways to manage these challenges. The frequency of visits to the hairdressers decreased after the menopause too, which could be explained partly by the less popular styles that require professional handling. Finally, hair colouring was equally likely before and after the menopause suggesting that hair colouring is not only driven by age-related hair greying, but there could be a significant fashion influence on such decisions.

The perceptions of changes to hair growth rate, thickness and shedding appeared unchanged following the menopause. As the hair curl of most participants was not chemically altered or hidden by using extensions, braiding, weaving etc, these findings suggest that either these manifestations of hair ageing are less prominent for these hair types, or that most people

appear not to be sensitive to them. However, the perceptions of overall hair manageability before and after the menopause changed towards becoming more difficult, which might be related to the fact that the above styling techniques are long lasting and require less attention on daily or weekly basis, whilst the natural hair does.

Satisfaction with current hair colour was correlated with feeling positive with natural hair and perceived attractiveness of natural hair. This is an interesting result as 72% of the participants were not colouring their hair regularly or at all at the current time. Satisfaction with current hair length and texture was correlated with feeling positive with natural hair, it's attractiveness and the attractiveness of the hair's current style.

Satisfaction with overall current hair appearance was correlated with feeling positive about natural hair and the perceived attractiveness of natural hair. The most common justifications for a choice of hair style were: "I like to wear my hair naturally", "It is easy for me to style my hair as I like", "I choose a hair style based on what I can do at home". The following home hair care was conducted on a weekly or more frequent basis: cleansing (shampoo or a similar product)=43%; oiling (hair and scalp)=48%; using deep leave-on conditioners=30%; using styling gels/creams=40%. The average estimated annual spending on hairdressing and home products was £243 (range £30 to £1000). When asked to list three words that come to mind when thinking about their hair, the following words appeared most frequently (Fig.1):

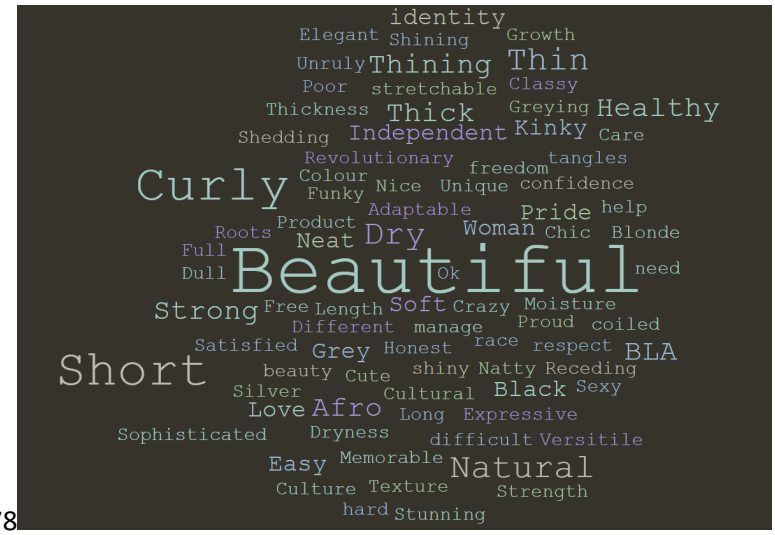
i) adjectives that did not describe directly hair's length, structure and other appearance: beautiful (n=13), independent, healthy, strong.
ii) adjectives that described hair appearance in a neutral or positive way: short, curly, healthy, natural.
iii) adjectives that described hair appearance in a more concerning way: thin, thinning, dry.
iv) other less common descriptive words: love, Afro, easy.

The QoL analysis suggested that wellbeing and the overall quality of life are not associated with having natural hair style or not.

Conclusion

A preference towards natural styles past menopause was demonstrated, with current hair length, texture and colour being associated with positive attitudes. However, the perception of decreased hair manageability could be related to the requirement to complete more haircare and styling tasks at home and more frequently than if the hair was subjected to a long-lasting styling technique such as relaxing or weaving. However, these changes to appearance, styling and personal effort increased satisfaction with hair but had no impact on the quality of life of the participants.

Figure 1. Word cloud of the descriptors of hair provided as free text in the survey.



Contribution

This study explored the effects of biological hair ageing on a growing demographic group of cosmetic users whose needs have not been addressed so far by the mainstream scientific and technological industry trends.

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Conflict of Interest Statement. NONE.

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