# HUMANITIES

## Will it ever grow back?

## The psychosocial impacts of alopecia

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#### **Abstract**

Alopecia is a common clinical complaint in the offices of family physicians and dermatologists. Here, we discuss common subtypes of alopecia, including androgenic alopecia and alopecia areata. Unfortunately, few resources have been invested in researching the effectiveness of psychological treatment for alopecia Pharmacological treatments alone are not enough. Medications can be a frustrating experience for both patients and their physicians due to their limited effectiveness. A case is made for health professionals taking an all-encompassing approach with patients is critical for skin conditions including alopecia.

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#### Introduction

Alopecia (hair loss) is a common clinical complaint. Two common subtypes of non-scarring alopecia are androgenic alopecia and alopecia areata. While the former is due to the effects of a genetically determined excessive response to androgens<sup>1</sup>, the latter is the product of an autoimmune phenomenon<sup>2</sup>. Chronic skin conditions can cause patients a great deal of distress in part due to fear of judgment from others. In this commentary, we will be discussing the role of psychosocial factors in the quality of life of patients with alopecia.

#### The Role of Stress

Long term exposure to stressful stimuli and ineffective coping skills can exacerbate skin conditions. Many skin conditions such as alopecia, urticaria, and delayed wound healing carry a psychosomatic component<sup>3</sup>. Emotional trauma from the feeling of abandonment is a risk factor for alopecia areata4. The literature shows that individuals diagnosed with alopecia areata commonly experience a severe antecedent mental stressor such as the death of a loved one prior to receiving their diagnosis4. The average number of stressful events that patients with alopecia face is also higher compared to healthy controls4.

Stress can be debilitating for patients. Those suffering from alopecia areata experience a lower quality of life because of their condition compared to healthy controls<sup>5</sup>. This has a negative impact on the social functioning, general health, and emotions of affected individuals<sup>5</sup>. Patients with alopecia areata experience more negative emotions including anger, fear, and low self-esteem compared to healthy controls<sup>6</sup>. Negative emotions are a predictor of many chronic conditions including cancer, diabetes, hypertension, and psoriasis.

With so many conditions being associated with stress, it should be imperative for healthcare providers to work with patients to develop coping skills.

## The Role of Family History

Heredity is a major contributing factor to alopecia. A study on androgenic alopecia found that men with fathers who experienced hair loss faced a 2.5 times greater likelihood of reporting hair loss than those whose fathers did not experience hair loss7. Other studies have confirmed the association between the patient's hair loss and positive family history for firstdegree relatives8. Approximately 80% of androgenic alopecia is accounted for by family history<sup>1</sup>. Similarly, 20% of patients with alopecia areata have a positive family history9.

The experience of growing up in a household where balding is commonplace is one that is all too familiar for patients suffering from alopecia. Male androgenic alopecia has an autosomal dominant heredity and affects 30-50% of men by the age of 501. Most males from my maternal and paternal family tree began losing their hair in their teens and twenties. Awaiting a similar fate as them is a source of anxiety for me. The distress that many patients face once the process of hair loss begins is understandable and requires empathy from healthcare professionals.

#### Mental Disorders: From Depression to Suicide

Chronic and severe alopecia can result in debilitating mental disorders due to alienation from society. Alopecia is not the only skin condition associated with psychological disorders. Psoriasis, atopic dermatitis, and acne all have prominent psychosocial aspects. In addition to stress, some major psychiatric disorders include major depressive disorder, anxiety disorders including obsessive compulsive disorder (OCD) and social anxiety disorders as well as somatoform disorders including body dysmorphic disorder (American Psychiatric Association, 1994).

Psychological distress may lead to psychiatric disorders. Depression and general anxiety disorder are the most common mental disorders experienced by patients with alopecia, occurring in 39% of patients<sup>6</sup>. Depression has a higher prevalence in patients less than 20 years of age<sup>6</sup>. This emphasizes the importance of building a network of psychosocial support for patients before their condition affects their mental health. Patients with anxious, dependent, and obsessive-compulsive personality disorders are particularly at risk of comorbid alopecia. Since personality disorders can occur at an early age, healthcare providers must be willing to support patients from a young age through shared decision making and referrals to mental health professionals.

Ensuring optimal mental health is a critical component of patient care. Healthcare providers are taught throughout their years of education to screen for depression when a patient presents with a debilitating chronic illness. However, the definition of "debilitating" is subject to debate. But what is clear is that chronic dermatologic conditions such as alopecia have a strong burden of disease. The social stigma and yearning to be normal can take a toll on the mental health of patients. This is why more attention must be drawn towards complementing pharmacologic treatments with psychotherapy.

Few resources have been invested towards researching the effectiveness of psychological treatment for alopecia<sup>10</sup>. Since medical treatments are viewed as largely ineffective, learning to live with alopecia through psychotherapy may benefit patients more than hoping for a possible cure. More research is required to determine how effective psychological treatment modalities are for patients coping with the psychological sequelae of alopecia.

## Are Pharmacologic Treatments Strong Enough?

Pharmacological treatments for subtypes of alopecia such as androgenic alopecia or alopecia areata can be a frustrating experience for both patients and their physicians due to their limited effectiveness, undesirable side effects, long timeframe for treatment, and slow growth<sup>11</sup>. For example, for androgenic alopecia, topical minoxidil and oral finasteride only partially reverse hair loss1. Minoxidil only achieves cosmetically acceptable results in a subset of patients<sup>12</sup>. Research in stem cell therapy to create new hair follicles is being explored<sup>11</sup>. As for alopecia areata, no treatment offers permanent remission at the moment<sup>13</sup>. Novel

therapies have demonstrated promising results of JAK inhibitors such as Ruxolitinib11. However, the lack of knowledge on the long-term efficacy and side effects of JAK inhibitors paired with their high costs limits their use in everyday practice<sup>14</sup>. High costs in particular are a concern for Canada's healthcare system, as expensive pharmaceuticals are out of reach for patients who rely on the public healthcare system. Thus, emphasizing the importance of a holistic and psychosocial approach would be of particular interest in such a system.

Pharmacotherapy is oftentimes insufficient in providing patients with alopecia relief. As health professionals, the psychological aspects of alopecia must be advocated for as an important tool for managing or preventing deteriorating mental health. Recognizing the distress and societal stigma that chronic skin conditions carry can help healthcare providers provide the best care for their patients.

### A Holistic Approach

Currently, there are no widespread programs in Canada aimed at addressing the mental health of patients with hair loss. Cognitive behavioral, group, and interpersonal therapies may potentially be of benefit to patients with alopecia and other skin conditions. A 2019 systemic review found that cognitive behavioral therapy is an effective treatment option for moderateto-severe psoriasis15.

Moreover, programs are needed to deliver greater holistic care to patients. Other skin conditions are receiving more attention on this front. Patients with atopic dermatitis and their family members can participate in educational programs that cater to the unique needs of each patient16. These multidisciplinary clinics include dermatologists, psychologists, and nurse practitioners. These centers have been implemented and have received positive feedback across North America, Europe, and Asia. As far as we know, Canadian programs aimed at delivering such services for alopecia are limited.

In addition, national campaigns that aim to decrease stigmatization of alopecia by society may have a positive effect on patients. Compared to older groups, younger patients suffering from androgenic alopecia cope better than older patients in part due to less stigmatization by fashion and media compared to older groups8. This is in part because today's metro-sexual youth culture adopts unique hairstyles8. An older study on youth by Wells in 1995<sup>17</sup> noted marked decreases in levels of self-esteem and a greater sense of unattractiveness in the younger generation of that era. This suggests an increased tolerance by society of hair loss over time. More awareness programs for hair loss may catalyze these positive changes.

### Conclusion

Taking an all-encompassing approach with patients is critical for skin conditions including alopecia. Healthcare providers must be aware of the psychological consequences of hair loss. Not all patients completely respond to pharmacologic therapy. Providing treatment to such patients may do more harm than good.

Considering the limited response pharmacological treatment that both androgenic alopecia and alopecia areata have shown thus far, it is time to consider other treatment modalities. We advocate for a more psychosocial model of care that considers the social, emotional, and physical wellbeing of patients with alopecia. Well-rounded care starts with mental and physical wellbeing.

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