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# Prevalence and psychological impact of alopecia among the graduate students

Dr. Pravin Dani <sup>1</sup>, Mr. Vishal Ghopade<sup>2</sup>

- 1. Dr. Pravin Dani, Professor cum Vice Principal, Bharati Vidyapeeth (Deemed to be University), College of Nursing, Sangli, Maharashtra, India 416414.
- 2. Mr. Vishal Ghorpade, Assistant Professor, Bharati Vidyapeeth (Deemed to be University), College of Nursing, Sangli, Maharashtra, India 416414.

**Corresponding author**. Dr. Pravin Dani, Professor cum Vice Principal, Bharati Vidyapeeth (Deemed to be University), College of Nursing, Sangli, Maharashtra, India 416414.

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#### **ABSTRACT**

Alopecia is the medical word for baldness or hair loss. Numerous factors, including genetic predispositions, environmental triggers, chemical exposure, medication side effects, nutritional deficiencies, excessive stress, and protracted sickness, can lead to hair loss. The present study was conducted in 600 students between the age group of 18-22 years of age. Quantitative approach with descriptive survey design was chosen in this study to assess the prevalence and psychological impact of alopecia. Prevalence of alopecia among the 600 samples, 41 samples were having alopecia which means the prevalence of alopecia is noted as 6.83%. Among the 41 samples, 4 samples were having no psychological impact of alopecia, 25 samples were having low psychological impact of alopecia and 12 students were having high psychological impact of alopecia. Among graduate students, who already have high levels of stress and academic pressure, the prevalence of alopecia and its psychological impact deserve careful attention.

**Key words-** alopecia, psychological impact, prevalence, graduates students.

#### INTRODUCTION

Hair is a significant component of one's self-image and influences how they are perceived by others. Alopecia (hair loss) is also known to have an impact on a person's psycho-logical health.

A person's hair plays a significant role in their self-image and has an impact on how they are perceived by others. Alopecia-related hair loss is known to have negative psychological effects on a person.<sup>1</sup>

While often perceived as a cosmetic concern, alopecia can profoundly impact an individual's self-esteem, social interactions, and overall psychological well-being. Among graduate students, who already contend with high levels of stress and academic pressure, the prevalence of alopecia and its psychological ramifications deserve careful attention.<sup>2,3</sup>

People with alopecia may be more susceptible to having significant depressive episodes, anxiety disorders, social phobias, or paranoid disorders since psychiatric problems are more prevalent in persons with alopecia than in the general population.<sup>4</sup> A study found that some alopecia patients continued to feel a sense of loss, demonstrating that for some people, dealing with alopecia may be comparable to grieving after a loss. Most of the research shows that people with alopecia have higher levels of anxiety and depression than others. They also experience lower self-esteem, poorer quality of life, and poor body image.<sup>5</sup>

#### MATERIALS AND METHODS

The study was conducted on 600 students between the age group of 18-22 years of age. Quantitative approach with descriptive survey design was chosen in this study to assess the prevalence and psychological impact of alopecia. Total of 600 Students of arts, commerce and science were included in the study. Study included the male students aged between 18-22 years of age; students who were facing continuous hair fall from the last six months. The students undergoing hair transplantation treatment were excluded from the study. Simple random sampling technique was used to collect the sample

Data collection tool:

The present study aimed at understanding the prevalence and psychological impact of alopecia among the graduate students. Researchers prepared data collection with three sections to accomplish the defined objectives of the study.

The tool consisted of three sections

Section I: Demographic data,

Section II: Hamilton Norwood scale,

Section III: Psychological impact assessment scale

Section I consisted of demographic data which included: age, class of study, stream of study, marital status, religion of the students, monthly income of the family.

Section II includes Hamilton Norwood scale, a standard tool to identify the prevalence of alopecia among the students.

It includes seven stages. Stages are as follows:

- **Stage 1**. No significant hair loss or recession of the hairline.
- **Stage 2.** There is a slight recession of the hairline around the temples. This is also known as an adult or mature hairline.
- **Stage 3**. The first signs of clinically significant balding appear. The hairline becomes deeply recessed at both temples, resembling an M, U, or V shape. The recessed spots are completely bare or sparsely covered in hair Stage 3 vertex. The hairline stays at stage 2, but there is significant hair loss on the top of the scalp (the vertex).
- **Stage 4.** The hairline recession is more severe than in stage 2, and there is sparse hair or no hair on the vertex. The two areas of hair loss are separated by a band of hair that connects to the hair remaining on the sides of the scalp.
- **Stage 5**. The two areas of hair loss are larger than in stage 4. They are still separated, but the band of hair between them is narrower and sparser.
- **Stage 6**. The balding areas at the temples join with the balding area at the vertex. The band of hair across he top of the head is gone or sparse.
- **Stage 7**. The most severe stage of hair loss, only a band of hair going around the sides of the head remains. This hair is usually not dense and may be fine.

Section III had 20 questions made by the researchers to assess the psychological impact of hair loss among the graduate students. Each question carried 4 options which were strongly agree, agree, disagree, and strongly disagree. Strongly agreed carries 4 points, agree carries 3 points, disagree carries 2 points and strongly disagree holds 1 point. The minimum points the student may obtain is 20 and the maximum points the student can obtain is 80. Points between 20-40 is considered as no impact ,40-60 is considered as low impact and the point between 60-80 is considered as high psychological impact of alopecia.

# **RESULTS AND DISCUSSION**

It is important to note that majority of the samples that is 65% belongs to the age group of 18-20. 55% were pursuing science and 27 % arts and the remaining 18% pursuing commerce as the stream of their studies. Out of 600 samples 278 students were students of first year of their course and 170 students were second year students

Among the samples majority of them were unmarried accounting 89.6% and the remaining 10.4% were married. Family income of 66.70% was above rupees 10000 and the remaining 33.3% was below 10000.

Table No.1: Prevalence of alopecia

n: 600

Stages of alopecia	Frequency	Percentage
		(%)
STAGE 1	336	56
STAGE 2	223	37
STAGE 3	18	3.0

STAGE 4	08	1.4
STAGE 5	05	0.9
STAGE 6	07	1.2
STAGE 7	03	0.5

Prevalence of alopecia among the 600 samples, students with Stage 1 and 2 of alopecia were not considered as alopecia. Stage 3 onwards were considered to have alopecia and included for prevalence. So total 41 samples were having alopecia which means the prevalence of alopecia was noted as 6.83%.

Table No.2: Psychological impact of alopecia

n=41

Impact of alopecia	Frequency	Percentage (%)
NO IMPACT (20 - 40)	4	9.75
LOW IMPACT (40 -60)	25	60.97
HIGH IMPACT (60-80)	12	29.28

Among the 41 samples, 4 samples were having no psychological impact of alopecia, 25 samples were having low psychological impact of alopecia and 12 students were having high psychological impact of alopecia which is 9.75%, 60.97% and 29.28% respectively. Similar study conducted by Alaa A Z Mohammed, Mohammed H Qayed, Hanan A Morsey (2022) which shows the more prevalence of alopecia among the Assuit University (Egypt) students which was 20.2%. Similarly in one of the cross-sectional study named 'The frequency of alopecia and quality of life in high-school students in rural areas (Sivrihisar, Mahmudiye, Alpu, and Beylikova) of Eskisehir' the incidence of alopecia was found to be 37.4% (n=622). Alopecia was more frequently seen in male students who have complaints about their scalps and those with a fatty scalp. In the study group, students with alopecia had poor HRQoL in general health perception, vitality, and mental health of SF-36.

# **Conclusion**

The present study tried to put light on the prevalence and psychological impact of alopecia among the graduate students in a non-metro city of India. The study found that the prevalence of alopecia among the students is 6.83% which is alarmingly high. The psychological impact of alopecia among graduate students extends beyond physical appearance concerns. For many, hair loss disrupts their sense of identity and self-image, leading to feelings of embarrassment, self-consciousness, and diminished confidence.

Among graduate students, who already have high levels of stress and academic pressure, the prevalence of alopecia and its psychological impact deserve careful attention.

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# **Conflict of Interest**

No conflict of interest involved.

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