DEMOGRAPHIC ASSOCIATIONS OF STRESS-INDUCED HAIR LOSS ASSESSED IN MEDICAL STUDENTS

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ABSTRACT

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Over half of medical students meet criteria for medical student in distress and nearly onequarter report considering or taking a leave of absence during their training. Little is known about the relationship between psychological stress and hair loss. This study sets out to identify demographic factors associated with stress-induced hair loss in a cohort of medical students.

METHODS

A cross-sectional study of medical students at a diverse, metropolitan university was performed. A questionnaire was developed to assess potential sociodemographic indicators of hair loss, quantify perceived stress using the Perceived Stress Scale, and record experiences of telogen effluvium, trichotillomania, alopecia areata. A total of 303 responses were recorded. Data was coded and analyzed using IBM-SPSS and will include Pearson correlation (r), ANOVA, student t-test, and chi-square test. Statistical significance was assigned at p<0.05.

Of the 303 responses, 20 students reported diagnosed hair loss by a medical professional (group 1), 167 students were not diagnosed but have reported having features of hair loss (group 2), and the remaining 116 reported no features of hair loss (group 3). Average stress scores for groups 1, 2, and 3 were 22 +/- 7, 21 +/- 5.7, and 18 +/- 5.8, respectively, which were significantly different (P<0.001). Average age for these groups were 25.4 +/- 2.9, 25.4 +/- 2.5 and 25.4 +/- 3.2, which were not significantly different (p=0.963). 60% of male participants and 62% of female participants reported some hair loss features or a clinical diagnosis of hair loss. Lower classmen (second and third year medical students) comprised 60% of group 1, 54.5% of group 2, and 55.2% of group 3. There was no significant association with hair loss and medical school class level (P=0.219).

RESULTS



CONCLUSIONS

Based on our results, there is an association between stress and hair loss. Stress scores for individuals with diagnosed hair loss (22 +/-7) was similar to those who reported having features of hair loss with no diagnosis (21 +/- 5.7) (P<0.001). No statistical significance was found in the ages across the 3 groups (p=0.963). Further analysis needs to be performed to assess whether a relationship exists between the most common causes of stress-induced hair loss and these demographic characteristics (age, gender, class level, etc.).

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