PREVALENCE AND CONSEQUENCES OF HAIR FALL, SURVEY BASED STUDY IN KARACHI

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ABSTRACT

Alopecia is sudden or gradually loss of hairs from the head or scalp and other bodily parts experienced by many males, females and children. There are several causes of hair fall like diet, medications, illness and some fungal infections. Alopecia can be experienced by any age group. Some hair treatment and use of hard chemicals on hairs can also cause brittle or dry hair or even complete hair loss. There is no treatment of hair fall. Medication can prevent further hair loss. Our survey aims to find out the prevalence and consequences of hair fall in general public and to find the common reasons. A cross-sectional and random sampling method was used for the collection of data from general public belongs to different age groups, genders and occupation in the month of October to December,2014 in Karachi, Pakistan. According to our survey, we find that 73.5% population is suffering from hair fall, 14% visited a dermatologist, 73% suffering from hair fall since few weeks to few years, 37% are taking proteinious diet, 77.5% taking medications, 82.5% are using oiling therapy to get rid of this hair fall, 71% are using hair covering whereas 70% have suffered from other scalp diseases.

Keywords: Alopecia, Scalp, Hair Fall, Fungal Infection, Scalp Disease

INTRODUCTION

Hair loss is the loss of hairs from the head and other body parts. Other terms used for hair fall or hair loss are baldness and alopecia.[1] Anyone (men, women and children) can experience hair loss. [2-6] Baldness is also referring to general hair loss and male pattern baldness (androgenic alopecia). Baldness can be caused by alopecia areata often, Alopecia areata is an autoimmune disorder. There are some forms of alopecia areata, extreme forms are alopecia totalis, that involved loss of all hairs from the head, and alopecia universalis, that involved the loss of all hair from the all body parts as well as head. Baldness have many causes, like fungal infection (tinea capitis and species of tinea), as a result of radiotherapy or chemotherapy, traumatic damage, such as by compulsive pulling (trichotillomania), as a result of autoimmune phenomena, and as a result of nutritional deficiencies such as iron. [7]Many people put tremendous stress on hairs. Hair dryers, hair dyes, hot curlers, permanent and hair straightening products, and chemical-laden cosmetics can cause brittle, dry, and thinning hair. [8] Men and women experience hair loss in different ways. Hair loss pattern for male typically affects the hairline (receding hairline) or top of the head or scalp, whereas females experience hair fall over the front or top of the scalp. [9] The reasons for hair loss can vary depending on individual. Sudden hair loss may be due to illness, medication, diet, or childbirth. [10-13]

Pathophysiology

A number of factors are involved in hair disorders. Genetic factors, endocrine abnormalities, diet, drug intake, systemic illnesses, and hair shaft abnormalities can be a reason for hair loss.[14-20]

Treatment

Treatments for the various forms of hair loss have little or no success. There are three drugs or medications which are supportive in the treatment of hair fall: finasteride, minoxidil and dutasteride. They typically work better to prevent further hair loss than to regrow lost hair. [21] Egg oil is an alternative option in treatment for hair loss. [22-24]

Methodology

We have performed a survey among the general public of Karachi, Pakistan for the collection of data about the Prevalence and Consequences of Hair Fall. A cross-sectional and random method was used for the collection of data in the month of October to December, 2014. A self-made questionnaire was used for the collection of data. Data was collected from 200 people.

Questions were asked from these subjects about their hair fall experience and to evaluate the causes of this hair loss. Data was collected on the base of gender, age groups and occupations. Analyzed data is represented in the form of charts.

RESULT AND DISCUSSION

Alopecia is sudden or gradually loss of hairs from the head or scalp and other bodily parts experienced by many males, females and children. There are several causes of hair fall like diet, medications, illness and some fungal infections. Alopecia can be experienced by any age group. Some hair treatment and use of hard chemicals on hairs can also cause brittle or dry hair or even complete hair loss. There is no treatment of hair fall. Medication can prevent further hair loss. Different questions were asked in our survey to evaluate the hair fall experience among general public.

The first question was asked in survey was about the hair fall experience, that is “have you experiencing Hair Loss?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that 147 people (61 male and 86 female) out of 200 answered this question as yes; they are experiencing hair fall (figure.1). According to age, 113 people of them are belong to the age group of 18-28years, 22 people of them are belong to the age group of 29-38years, 3 people of them are belong to the age group of 39-48years, and 9 of them belongs to the age group above 48years (figure.2). According to occupation, 111 of them are students, 7 are housewives and 29 of them were professionals (figure.3). While other 53 people answered that they have no such complains. According to gender 37 of them are male and other16 are female (figure.1). According to age, 40 people of them are belong to the age group of 18-28years, 7 people of them are belong to the age group of 29-38years, 1 person of them is belong to the age group of 39-48years, and 5 of them belongs to the age group above 48years (figure.2). According to occupation, 29 of them are students, 6 are housewives and 18 of them were professionals (figure.3).

The second question was asked in survey was about the visit of dermatologist, that is “have you ever visited a dermatologist?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that only 28 people out of 200 answered this question as yes, they have visited dermatologist. According to age, 26 people of them are belong to the age group of 18-28years, 1 person of
them is belong to the age group of 29-38 years, 1 person of them is belong to the age group of 39-48 years (figure 4). According to occupation, 18 of them are students, 2 are housewives and 8 of them were professionals (figure 5). While other 172 people answered that they have never visited any dermatologist. According to age, 127 people of them are belong to the age group of 18-28 years, 28 people of them are belong to the age group of 29-38 years, 3 persons of them are belong to the age group of 39-48 years, and 14 of them belongs to the age group above 48 years (figure 4). According to occupation, 122 of them are students, 11 are housewives and 39 of them were professionals (figure 5).

Fig. 1: Hair loss experience with gender.

Fig. 2: Hair loss experience with age.

Fig. 3: Hair loss experience with occupation.
The third question was asked in survey was about the duration of hair fall, that is “how long have you been suffering from hair loss?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that 73 people out of 200 are suffering from hair loss since few weeks. According to gender 41 of them are male and other 32 are female (figure.6). According to age, 58 people of them are belong to the age group of 18-28years, 10 persons of them are belong to the age group of 29-38years, 1 person of them is belong to the age group of 39-48years and 4 of them belongs to the age group above 48years (figure.7). According to occupation, 52 of them are students, 3 are housewives and 18 of them were professionals (figure.8). We have analyzed that 29 people out of 200 are suffering from hair loss since few months. According to gender 6 of them are male and other 23 are female (figure.6). According to age, 20 people of them are belong to the age group of 18-28years, 6 persons of them are belong to the age group of 29-38years and 3 of them belongs to the age group above 48years (figure.7). According to occupation, 28 of them are students, 1 is housewife (figure.8). We have analyzed that 44
people out of 200 are suffering from hair loss since few years. According to gender 16 of them are male and other 28 are female (figure 6). According to age, 34 people of them are belong to the age group of 18-28 years, 5 persons of them are belong to the age group of 29-38 years, 3 persons of them are belong to the age group of 39-48 years and 2 of them belongs to the age group above 48 years (figure 7). According to occupation, 52 of them are students, 3 are housewives and 18 of them were professionals (figure 8). We have analyzed that 54 people out of 200 are not suffering from hair loss. According to gender 35 of them are male and other 19 are female (figure 6). According to age, 41 people of them are belong to the age group of 18-28 years, 8 persons of them are belong to the age group of 29-38 years and 5 of them belongs to the age group above 48 years (figure 7). According to occupation, 29 of them are students, 7 are housewives and 18 of them were professionals (figure 8).
The fourth question was asked in the survey about the diet plan, that is “do you take proteinious diet regularly like milk, egg and yogurt?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that 74 people out of 200 are taking proteinious diet regularly like milk, egg, and yogurt. According to gender 41 of them are male and other 33 are female (figure.9). According to age, 59 people of them are belong to the age group of 18-28 years, 10 persons of them are belong to the age group of 29-38 years, 1 person of them is belong to the age group of 39-48 years and 4 of them belongs to the age group above 48 years (figure.10). According to occupation, 53 of them are students, 3 are housewives and 18 of them were professionals (figure.11). We have analyzed that 126 people out of 200 are not taking proteinious diet regularly like milk, egg, and yogurt. According to gender 57 of them are male and other 69 are female (figure.9). According to age, 94 people of them are belong to the age group of 18-28 years, 19 persons of them are belong to the age group of 29-38 years, 3 persons of them are belong to the age group of 39-48 years and 10 of them belongs to the age group above 48 years (figure.10). According to occupation, 87 of them are students, 10 are housewives and 29 of them were professionals (figure.11).
The fifth question was asked in survey was about the medication use, that is “have you ever been taken medication for hair fall?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that 155 people out of 200 are taking medications. According to gender 78 of them are male and other 77 are female (figure.12). According to age, 115 people of them are belong to the age group of 18-28 years, 23 persons of them are belong to the age group of 29-38 years, 4 persons of them are belong to the age group of 39-48 years and 13 of them belongs to the age group above 48 years (figure.13). According to occupation, 101 of them are students, 12 are housewives and 42 of them were professionals (figure.14). We have analyzed that 45 people out of 200 are not taking medications. According to gender 20 of them are male and other 25 are female (figure.12). According to age, 38 people of them are belong to the age group of 18-28 years, 3 persons of them are belong to the age group of 29-38 years, and 1 of them belongs to the age group above 48 years (figure.13). According to occupation, 39 of them are students, 1 is housewife and 5 of them were professionals (figure.14).
The sixth question asked in survey was about the improvement or relieving therapy, that is “what makes you improve or relief your hair fall?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that 165 people out of 200 uses oiling therapy to improve the hair fall or as hair fall solution. According to gender 73 of them are male and other 92 are female (figure 15). According to age, 128 people of them are belong to the age group of 18-28years, 21 persons of them are belong to the age group of 29-38years, 4 persons of them are belong to the age group of 39-48years and 12 of them belongs to the age group above 48years (figure 16). According to occupation, 119 of them are students, 12 are housewives and 34 of them were professionals (figure 17). We have analyzed that 20 people out of 200 uses proteinious diet to improve the hair fall or as hair fall solution. According to gender 15 of them are male and other 5 are female (figure 15). According to age, 15 people of them are belong to the age group of 18-28years, 4 persons of them are belong to the age group of 29-38years, and 1 of them belongs to the age group above 48years (figure 16). According to occupation, 8 of them are students, 1 is housewife and 11 of them were professionals (figure 17). We have analyzed that 13 people out of 200 uses conditioning to improve the hair fall or as hair fall solution. According to gender 8 of them are male and other 5 are female (figure 15). According to age, 8 people of them are belong to the age group of 18-28years, 4 persons of them are belong to the age group of 29-38years, and 1 of them belongs to the age group above 48years (figure 16). According to occupation, 11 of them are students, 2 of them were professionals (figure 17). According to our survey, a male student uses medications as hair fall solution who belongs to age group of 18-18years.
The seventh question was asked in the survey was about the head covering that is “do you cover your head usually with any of the following head coverings?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that 58 people out of 200 uses no hair or head covering. According to gender 33 of them are male and other 25 are female (figure 18). According to age, 43 people of them are belong to the age group of 18-28 years, 10 persons of them are belong to the age group of 29-38 years, 1 person of them is belong to the age group of 39-48 years and 4 of them belongs to the age group above 48 years (figure 19). According to occupation, 37 of them are students, 3 are housewives and 18 of them were professionals (figure 20). We have analyzed that 102 people out of 200 uses scarf for head covering. According to gender 26 of them are male and other 76 are female (figure 18). According to age, 79 people of them are belong to the age group of 18-28 years, 14 persons of them are belong to the age group of 29-38 years, 2 persons of them are belong to the age group of 39-48 years and 7 of them belongs to the age group above 48 years (figure 19). According to occupation,
82 of them are students, 8 are housewives and 12 of them were professionals (figure 20). We have analyzed that 22 people out of 200 uses helmet for head covering. According to gender all 22 are male (figure 18). According to age, 17 people of them are belong to the age group of 18-28years, 3 persons of them are belong to the age group of 29-38years and 2 of them belongs to the age group above 48years (figure 19). According to occupation, 7 of them are students, 1 is housewife and 4 of them were professionals (figure 20). We have analyzed that 17 people out of 200 uses cap for head covering. According to gender all 17 are male (figure 18). According to age, 13 people of them are belong to the age group of 18-28years, 2 persons of them are belong to the age group of 29-38years, 1 persons of them is belong to the age group of 39-48years and 1 of them belongs to the age group above 48years (figure 19). According to occupation, 14 of them are students, 1 is housewife and 2 of them were professionals (figure 20).

The last question was asked in survey was about the scalp disease that is “have you ever suffered from any other scalp disease?” This question was asked from 200 people. According to gender, 98 of them are male while 102 of them are females. We have analyzed that 60 people out of 200 have never suffer from any other scalp disease. According to gender 34 of them are male and other 26 are female (figure 21). According to age, 46 people of them are belong to the age group of 18-28years, 8 persons of them are belong to the age group of 29-38years, 2 person of them are belong to the age group of 39-48years and 4 of them belongs to the age group above 48years (figure 22). According to occupation, 36 of them are students, 4 are housewives and 20 of them were professionals (figure 23). We have analyzed that 41 people out of 200 have suffer from dermatitis which is one of the scalp disease. According to gender 22 of them are male and other 19 are female (figure 21). According to age, 33 people of them are belong to the age group of 18-28years, 6 persons of them are belong to the age group of 29-38years, 1 person of them is belong to the age group of 39-48years and 1 of them belongs to the age group above 48years (figure 22). According to occupation, 31 of them are students, 2 are housewives and 8 of them were professionals (figure 23). We have analyzed that 95 people out of 200 have suffer from dandruff which is a scalp disease. According to gender 41 of them are male and other 54 are female (figure 21). According to age, 70 people of them are belong to the age group of 18-28years, 15 persons of them are belong to the age group of 29-38years, 1 person of them is belong to the age group of 39-48years and 9 of them belongs to the age group above 48years (figure 22). According to occupation, 69 of them are students, 7 are housewives and 19 of them were professionals (figure 23). We have analyzed that 4 people out of 200 have suffer from fungal infections. According to gender 1 of them is male and other 3 are female (figure 21). According to age, all the 4 people of them are belonging to the age group of 18-28years (figure 22). According to occupation, all the 4 are students (figure 23). We have done these types of survey studies which are useful for health professionals 25-31.

CONCLUSION

According to our survey, we find that 73.5% population is suffering from hair fall, 14% visited a dermatologist, 73% suffering from hair fall since few weeks to few years, 37% are taking proteinious diet, 77.5% taking medications, 82.5% are using oiling therapy to get rid of this hair fall, 71% are using hair covering whereas 70% have suffered from other scalp diseases.
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