

A CROSS SECTIONAL STUDY ON *KESHA SAMVARDHAN* (HAIR CARE) TO EVALUATE ITS EFFECT ON HAIR IN JAMNAGAR TERRITORY

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INTRODUCTION:

Concept of Beauty:

There is no doubt that the world of today is full of glamour and glory. Thus the concept of beauty is gaining more and more attention globally, which is defined on few factors, among hair is an important one. Ovil said in brief words "Ugly is a field without grass, plants without leaves and head without the hairs"¹. So hair adorns one of the most highlighting part of the body, it has great aesthetic value and is the crowning glory of every one.

Healthy, beautiful, long and attractive hairs add charm to one's personality. That's why the cascade of beautiful, long and silky hairs mesmerized every person. Looks of hair is a vital element in envisage of beauty. On contrary withering hairs may totally turn the picture bizarre and unacceptable, specially when it starts at younger age. Hence to keep the hair in healthy state is entirely the duty of everyone because just like face, hair is also mirror of health².

Kesha Samvardhana (Hair Care):

From the beginning of civilization, human being wanted to enhance their beauty, so that he or she looks more and more attractive. For that it has started to take care of the hair, face, skin etc. To have better, beautiful and healthy hair, man have been finding out many hare care materials, equipments, techniques, for the various purposes like combing, cutting, colouring, styling etc. which can be said as *Kesha Samvardhana* or hair care.

Need of study:

There are many products available in the market for various purposes of hair like combing, cleaning, nurturing, styling, colouring etc. Each and every product claims to have beneficial effects on the hair, but the reality is far from such claims. On contrary, most of them have hazardous adverse effects on the hair and in many of the cases they become a cause of hair fall.

Therefore, to evaluate the actual effect of hair care habit and its product on the hair, the cross section study on *Kesha Samvardhana* was carried out.

Financial aspect:

In today's modernize era, the people are so much concern for the hair and the beauty across the world, that the hair care product is become a multi-billion dollar industry. The amount spends on hair care is even more than the Diabetes cares or Hypertension cares³. If the trend shifted on herbal and Ayurvedic way of hair care, may increase our export revenue and help to achieve target to become 5 trillion \$ economy by 2025⁴.

AIMS & OBJECTS:

- To evaluate the effect of *Kesha Samvardhana*: hair care on the hair.

MATERIALS AND METHOD⁵:

A. Materials

- **For literary part:** For the literary portion of the work, the materials were collected from the various sources like Ayurveda *Samhita*, classical books of Ayurveda, various published article of

international / national journals, magazines, internet etc.

- **For clinical part:** For the comparative cross sectional study, 306 which includes 212 of *Khalitya* and 94 of Healthy individual of Jamnagar tertiary were examined in detailed with specialized prepared proforma incorporating all the habit related to hair care to evaluate the effect of hair care habits and its products (*Kesha Samvardhana*) on hair.
- The patients of *Khalitya* attending the O.P.D./I.P.D. section of I.P.G.T.& R.A. hospital were selected and for the survey on the healthy hair, the competition on “*Sundar Kesha*” was organized with Prabhaben Arogya Kendra, Jamnagar and participants were surveyed. They were examined in detail for their *Kesha Samvardhana* or hair care habits.

Diagnostic criteria:

The diagnosis of patients of *Khalitya* was done based on based of its cardinal symptom given in Ayurvedic literatures i.e. gradual hair loss from scalp region⁶. Detailed history with examinations was done on the basis of proforma prepared for the purpose.

Inclusion criteria:

- Patient whose age >18 yrs. and <45 yrs.
- Patient whose hair collection through the first hair combing of morning was more than 100 hairs⁷.

Exclusion criteria:

- Patient whose age >45 yrs. and < 18 yrs.
- Patient who diagnosed to have local disease like – Alopecia areata, Alopecia totalis, Tinea capitis, Folliculitis decalvans and in Ayurvedic terms patient of *Arunshinka*, *Indralupta*.
- Patients with any major diseases like carcinoma, AIDS etc.
- Patient suffering from any sever systemic disease were be excluded.
- Patients with any chronic disease or *Dhatukshayatva* involved in the pathophysiology of disease like *Madhumeha*, *Rajyakshama* etc.
- Female patient who had pregnancy, deliver a baby, lactating mother or menopausal period.

Investigations:

- **Blood:** Routine Haematological investigations were carried out to assess the present status of

patients as well as exclude other pathological conditions.

- **Urine:** Routine and Microscopic examinations were done to rule out any other pathology if there.

Observation of the Surveyed Study:

In the cross sectional study of 306 subjects on *Kesha Samvardhana*, it was observed that majority of subjects i.e. 47.06 % were belonging to age group of 18-25 yrs., the 80.07 % were female, the 78.63 % were Hindu, 51.91 % had graduation level of education and 59.54 % were yet not married.

Oil Application and Massage (*Taila Abhyanga*):

The survey study revealed that the majority of people i.e. 93.14% were applying oil on the hair, but 6.86% were not applying at all. Maximum were applying coconut oil (60.35%) on the hair, followed by herbal drugs medicated oil (33.33%), *Eranda* oil (3.86%) and *Tila* oil (1.40%).

Regarding the habit of *Taila Abhyanga* on the scalp, it was observed that majority of people i.e. 76.49% were doing *Taila Abhyanga*, but, most of them (50.53%) were doing *Abhyanga* improperly. The 38.95% were doing less *Taila Abhyanga*, 25.26% were doing *Taila Abhyanga* with harsh rubbing, 5.26% were doing *Taila Abhyanga* in wet hair and 15.44% were doing *Taila Abhyanga* at night and wash-out in the morning. While 23.51% were not doing *Taila Abhyanga* but they just applied the oil. Frequency of oil application wise, the 37.54% were doing *Taila Abhyanga* twice a week, followed by once (34.74%), thrice (14.04%), seven times (9.47%), four times (3.16%), six times (0.70%) and five times (0.34%) in a week. Majority of people i.e. 80.70% were regular for *Taila Abhyanga* while 19.30% were not regular. But, among those who did *Taila Abhyanga*, 61.75% were using less oil, 33.33% were using excessive and only 4.91% were use appropriate quantity of oil for application on the scalp.

Hair Care Products:

Use of hair care products wise, it was found that majority had habit to use one or other hair care products including: hair lotion (3.92 %), hair dye (8.50%), hair cream (3.59%), hair colour (12.09%), *Heena* (61.44%), egg (6.21%), hair conditioners (19.28%), hair spray (0.98%) and bleaching powder (1.53%).

Hair Washing (*Kesha Prakshalana*):

In the survey, it was observed that majority of individuals i.e. 61.76% were using cold water for hair washing, 25.49% were using warm water and 12.75% were using hot water for hair washing. Moreover the 56.21% were using soft water, whereas 43.79% were using hard water and 2.29% patients were using highly chlorinated water to wash their hair. The 65.03% were using shampoo and 48.04% were using soap, while 4.90% were using shampoo and soap together to wash the hair while only 2.29% patients were using herbal crude drugs to wash the hair. Frequency of hair washing wise, maximum i.e. 46.73% used to wash the hair twice in a week, followed by once (21.57%), thrice (17.65%), seven times (9.80%), four times (3.27%) and five times in a week (0.98%).

Combing:

In this survey, the 65.36% were combing in wet hair while 34.64% were in dry hair and 39.54% were combing forcefully.

Hair Care Equipment:

Use of hair care equipment wise, it was observed that majority of participants of the research study were using one or other hair equipments including : hair drier (8.17 %), hair brush (0.65%), hair roller (4.25%), hair curlers (6.21%), hair pin (65.03%), hair rubber (68.30%) and other types of hair equipments (1.31%).

Hair Style:

Hair style wise it was observed that majority of persons i.e. 94.12% had usual hair style, but 8.17 % had clipping, 2.61% had pumming, 11.76% had curly, 0.65% had layers, 0.65% had feather layers and 2.29% had step-cut type of hair style.

Faulty Habits:

It was also noticed regarding faulty habit that the 0.65% were wear hat/cap tightly, 7.84% tied the hair tightly for prolonged time and 0.33% keep their hair wet.

Factors effecting the hair:

In the 71.76% persons of the study, one or other factor was found which affect their hair. Looking towards details of the factors, change of water was found in 16.79%, alkaline water in 0.76%, change of atmosphere in 22.90%, dry atmosphere in 12.21%, change of hair washing shampoo or soap in 14.50%, use of shampoo in 3.82%, *Adhika Vata/Atapa sevan* in 1.53%, gynecological problems in 4.58%,

contraceptive pills used by female in 9.80% and stress & tension was observed in 7.63% individuals.

On the contrary, in the 41.98% subjects, one or other factor was observed, which makes the hair better. The Oilation was found in 35.88%, meditation in 3.05%, relaxation in 2.29% and yoga practice was observed in 0.76% of the people.

DISCUSSION:

In the 21st century of modernized and metro life, people adopted western methods of hair care only a few follows the traditional hair care habits like *Moordha Taila*, *Keshya Lepam*, *Talapothichil*. The incorrect hair care methods, excessive use of various types of chemical shampoos, soaps, hair colors along with unending race for synthetic cosmetics for conquering new horizons in fashion etc. leading to adverse effect on hair and many cases, it causing fall of hair prematurely.

Oil Application and *Taila Abhyanga* (*Moordha Taila*):

It is a tradition in our culture to apply the oil on the hair. That's why most of people in the study had habit to apply the oil on the hair, whether it is coconut oil, herbs medicated oil or any other oil. In Ayurvedic literature also, it has been advised to apply hair oil on scalp everyday i.e. *Moordha Taila* as a part of *Dinacharya* to prevent from early graying of hair, premature hair fall and to make hair black with firm rooted⁸.

***Shiroabhyanga*:** Those who applied hair oil, most of them used to do *Taila Abhyanga* on the scalp, they just not applied oil on head. So their hair were found healthy. *Acharya Sushruta* has mentioned that everyday proper *Shiroabhyanga* increases length and number of hair. It also brings smoothness, blackness of hair and makes it strong. So hair falling is not occurred⁹. But, who avoid *Shiroabhyanga* likely to have hair falling. Unfortunately, more than half of them (50.53%) were doing *Abhyanga* with inappropriate methods because they neither aware about its importance for hair nor they know its proper procedure. Hence, they used to follow faulty hair care habits related with *Moordha Taila* like *Taila Abhyanga* with harsh rubbing, *Alpa Taila Abhyanga* and *Taila Abhyanga* in wet hair etc., which may break the hair, makes it weak, fragile and pluck out from its root causing hair fall. It is termed as 'Massage Alopecia' in dermatological science or in trichology¹⁰.

Hair Care Material /Product:

Now a day, everyone uses hair cosmetics products to attain eye-catching look without understanding their positive or negative effects. Thought most of the products are prepared with harmful chemicals like hydrogen peroxide, carbonate hydroxide, benzyl alcohol, silicone conditioner, sodium benzoate etc; they may decrease elasticity of hair, damage the cuticle layer, create changes in hair structure, make hair coarser, fragile, lifeless, weaken from its root and all these resulting as a damage of hair¹¹. The same was observed in the study also that majority were using one or other hair products including: conditioners, colours, dye, lotion, cream, bleaching powder, spray etc. The few of them used Heena for *Kesha Lepamam*. But now a day in the market, what found as Heena, is also adulterated.

Hair Washing (*Kesha Prakshalana*):

Kasha Prakshalana is an important part of the hair care, which removes the dirt, sweat and pollutant. Most of people of the study were use normal cold water, which is recommended. Still, many of them were use hot or warm water, which are harmful for hair¹². We know that the use of soft water for hair washing is good. Even though, use of hard or highly chlorinated water was found usual. They may deposit harmful alkaline salt on the scalp leading to damage of hair follicles. The use of shampoos and soaps is common but their excessive use harms become of the harmful chemicals contains like Hydrogen peroxide, carbonate hydroxide etc. Most of subjects washed their hair once or twice in a week, which is not sufficient, specially in the humid, dusty and smoky atmosphere of Jamnagar. If the deposited dust or smock is not washed out regularly, they harm the natural shine, luster, smoothness and strength of hair¹³.

Hair combing:

Combing serves a similar function as massaging and helps to keep your scalp and hair in good health¹⁴, but if the same is performed improperly may affect adversely. Majority of people have one or other faulty habit of combing. In the study, few were comb in wet hair. Though the roots become soft in the wet hair, they may easily pull out. Similarly, forceful combing also causes the same¹⁵. Such habits often injure the scalp and atrophied the hair follicles resulting as hair falling, which is known as "Brush Alopecia¹⁶."

Hair care equipment (*Kesha Samvardhana Sadhana*):

Few of surveyed were using hair drier to dry-up the hair. The blow of hot air removes the natural oiliness, so the hair became fragile, dull, and lifeless¹⁷. The hair falling due to frequent use of brush roller is coined as "Traction or Brush roller Alopecia". Same fact was also noticed in the study too, who were victim of hair falling because of frequent/excessive use of brush roller¹⁸. The electrical hair rollers and hair curlers used for changing the hair style was also weakens the hair and sometimes it is pulled out from the root, results in *Khalitya*¹⁹. Similarly hair pin and hair rubber are widely used in female to tight the hair, may also spoil the beauty of hair.

Hair Style:

Generally, young and teen agers adopt different hair style as well they change it frequently. In the beginning it looks modern and fashionable, but after a long it can damage the hair cuticle, shaft and its root. Thus, hair becomes dull, lustre less and life less. It was observed in the surveyed that many had such type of hair styles like clipping, pumming, curly, layers, feather layers, step-cut etc²⁰.

Factors effecting the hair:

Apart of that many of the study had some wrong habits including wearing of hat/cap for prolong period, tying hair tightly, keeping wet hair etc., which were cause of hair falling²¹. *Adhika Vata/Atapa sevan*, stress & tension etc. factors negatively affect the hair, whereas oilation, meditation, relaxation, yoga etc. makes the hair better, indicating that if little time is given to daily regiments like oil application on head or meditation, provides not only relief but it can prevents hair falling too²².

Gynecological problem:

In female, diffuse hair loss also occurs by the drugs which induce abortion²³, contraceptive pills or a significant stress after hysterectomy. Such types of conditions affect the hair growth cycle. The same was observed in the study too. Those who took contraceptive pills²⁴, their hair fall triggered.

CONCLUSION:

On the basis of this study following conclusion can be drawn:

- ☞ The hair is always an important factor of one's beauty and personality. Hence, *Kesha Samvardhaka* methods had suggested in Ayurvedic literature as a daily regiments.
- ☞ The unending race for conquering new horizons in today's fashion and craziness to acquire attention grabbing look, started to use of various western chemical based hair care methods, materials and equipments.
- ☞ The research study very clearly illustrated that the newer or modern *Kesha Samvardhaka* materials and methods, most of the times have harmful effect on hair.
- ☞ The plus point observed in case of ancient hair care method is that if one follows regularly with appropriate methods, one can achieve the best of one's healthy hair. It is a great benefit to the mankind from Ayurved in the area of hair care.

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