

COMPARATIVE STUDY OF VARIOUS HERBAL COSMETICS: A SURVEY

MEGHA TIWARI^{1*}, VISHAL DUBEY¹, AKANKSHA LAHIRI²¹Department of Pharmacy, Naraina Vidyapeeth Group of Institution, Faculty of Pharmacy, Kanpur, Uttar Pradesh, India. ²Department of Pharmacy, Pranveer Singh Institute of Technology, Kanpur, Uttar Pradesh, India. Email: meghatiwari3548@gmail.com

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ABSTRACT

Objective: The objective of the study was to compare various herbal cosmetic brands to find their popularity ranking.**Methodology:** The method used is a survey-based questionnaire.**Results:** According to the above survey conducted in Kanpur regarding herbal products, we came across the following result that Himalaya was the most popular brand as compared to other brands like Patanjali and Joves and other similar brands.**Conclusion:** There is not at all shortage in the demand for herbal products in the market. The consumers concern toward health risk and harmful effect of chemical products forcing them to switch over to natural products. There is high favorability of Himalaya products among its users.**Keywords:** Herbal cosmetics, Herbal brands, Popularity, Safety, Quality, Herbal market.© 2020 The Authors. Published by Innovare Academic Sciences Pvt Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>) DOI: <http://dx.doi.org/10.22159/ajpcr.2020.v13i10.38904>

INTRODUCTION

The word cosmetic was derived from the Greek word "kosmtikos" that means having the ability, arrange, and talent in decorating [1]. The conception of beauty and cosmetics dates back to ancient man and civilization. The origin of cosmetics was related to looking, fighting, faith, and superstitious notion and later related to medication [2]. The cosmetics according to the Medicine and Cosmetics Act are outlined as articles supposed to be rubbed, poured, besprent, or sprayed on, introduced into or otherwise applied to the face or any part thereof for cleansing, beautifying, promoting attractiveness, or sterilization of the skin [3].

Herbal cosmetics, referred as products, are developed, using numerous permissible cosmetic ingredients to make the base during which one or more herbal ingredients are required to provide defined cosmetic benefits which, shall be called as "Herbal Cosmetics." The demand of herbal medicines is increasing rapidly thanks to their skin friendliness and lack of side effects. The best thing of the herbal cosmetics is that it is purely made of the herbs and shrubs and therefore provides the body with nutrients and other useful minerals (Table 1) [4,5].

There is currently, however, growing scientific proof that plants possess a huge and complicated arsenal of active ingredients (phytochemical) in a position not only for sole purpose to calm or smoothen the skin but also, however, actively restoring, healing, and shielding the skin.

Advantages of herbal cosmetics over synthetic [6]:

- Natural products
- Safe to use
- Compatible with all skin types
- Wide selection variety
- Fits your budget
- Not tested on animals
- No side effects.

Herbal cosmetics can be classified into following major categories:

- Cosmetics for enhancing the appearance of facial skin
- Cosmetics for hair growth and care
- Cosmetics for skin care, particularly in teenager (acne, pimples, and sustaining)

- Shampoos, soaps, powders and perfumery, etc.
- Miscellaneous products.

Herbal plants for skin care

1. Dry skin treatment
 - Coconut oil
 - Sunflower oil
 - Aloe [7]
 - Jojoba oil
 - Olive oil [8]
 - Sweet flag
 - Kesar.
2. Anti-aging treatment
 - Golden root [9]
 - Carrot [4]
 - Ginkgo
 - Comfrey
 - Echinacea.
3. Skin protection
 - Green tea [10]
 - Calendula [11]
 - Turmeric [12].
4. Miscellaneous
 - Garlic (promotes skin healing, antibacterial)
 - Neem (antiseptic, reduce dark spots, antibacterial)
 - Gotu kola (wound healing, reduce).

Herbal plant for hair care

1. Amla [13]
2. Almond oil [14]
3. Shikakai
4. Brahmi
5. Burdock root
6. Gotu kola
7. Lemon
8. Bhringraj [4]
9. Dandruff treatment
 - Henna
 - Neem
 - Shikakai

- Hirda
- Behada
- Amalaki
- Magic nut
- Rosary pea
- Sweet flag
- Cashmere tree
- Mandor [4]

Essential oils

1. Rose oil [15]
2. Eucalyptus oil
3. Citronella oil
4. Anise oil
5. Coriander oil
6. Grapefruit oil
7. Jasmine oil
8. Palma rose oil
9. Sandalwood oil [4]

Antioxidants

1. Tamarind [16-18]
2. Vitamin C [19]
3. Vitamin E [19]

Advantages of herbal medicine:

- Herbal medicine has a long history of use and higher patient tolerance as well as acceptance
- Medicinal plants have a renewable supply, that is, our sole hope for sustainable supplies of cheaper medicines for the growing population in the world [20]
- Availability of medicinal plants is not a drag particularly in developing countries such as India which has rich agro-climatic, cultural, and ethnic biodiversity
- The cultivation and processing of medicinal herbs and herbal products are environmental friendly [21]
- Prolong and apparently placid use of herbal medicines may provide testimony of their safety and efficacy.

Throughout the world, herbal medicine has provided several of the most potent medicines to the huge arsenal of drugs to be available to the modern medical science, in both, the crude form as well as in the form of pure chemical on which modern medicines are structured (Table 2) [22].

The cosmetic products are the best option to reduce skin issues such as hyperpigmentation, skin wrinkling, skin aging, and rough skin texture. In addition, it also features a great future ahead as compared to the synthetic cosmetics. Proper regulation of these herbs and its standardization will cause its tremendous and significant growth in herbal cosmetics field.

METHODOLOGY

The purpose of the research was to

- Understand which kind of cosmetics products do people prefer during the purchase?
- To know, whether the purchase of cosmetic by the consumers is actually affected by which factors?
- This study additionally focuses on whether or not the packaging of the cosmetic products actually plays a role or not within the mind of the consumers while making the cosmetic purchase decision
- This study will try and apprehend, how the male client of the cosmetics gets influenced, and for that what cosmetics firms and retailers do to focus on the male client for their cosmetics.

This research was carried out in different zones of Kanpur.

We conducted a cross-sectional questionnaire study of people in Kanpur. Data collection took place between January 2020 and April

2020 in Kanpur. Data were collected using a convenience sample in three different regions in Kanpur: Rawatpur (urban and rural), Shuklaganj (urban and rural), and Ramadevi (rural and urban). Participation in the survey was entirely voluntary, and by filling in the questionnaire, volunteers agreed with participation in the study. The hospital institutional ethics committees stated that ethics approval was not necessary for this anonymous questionnaire study.

Research questions

No validated questionnaires in this context were available. Consequently, a standardized questionnaire was developed based on available literature and available questionnaires about knowledge and use of complementary and alternative medicine. Before preparing the questionnaire, the following issues were considered.

1. What kind of products do people use?
2. What do people look for when they buy cosmetics?
3. What are the specific reasons to use the cosmetic products?
4. Reasons for shifting towards herbal brands?
5. On which personality traits do a cosmetic buyer, evaluate, and considers a particular brand.

Questionnaire

1. What kind of product do you use?
 - a. Herbal
 - b. Any other
2. What do you look first when you buy a product?
 - a. Brand
 - b. Efficiency
 - c. Advertisement
3. Which of the following brands you are most aware of?
 - a. Himalaya
 - b. Patanjali
 - c. Joves
4. Promotion or advertisement has always influenced your intention toward a particular brand?
 - a. Yes
 - b. No
5. What is the major reason for purchasing a selected brand?
 - a. Brand name
 - b. Quality
 - c. Price
6. Since how long have you been using an herbal product?
 - a. <6 months
 - b. 6 months
 - c. More than 6 months
7. What were the reasons for your shifting to herbal brand?
 - a. Brand name
 - b. Price
 - c. Appearance/packaging
 - d. Ingredients
8. The rate on the scale of 10 your favorite herbal brand on the basis of following attributes: Color/variety/fragrance
 - a. <5
 - b. Between 5 and 8
 - c. More than 8
9. Have you ever felt the side effects for herbal products?
 - a. Yes
 - b. No
10. (A) Shampoo
 - a. How important is the wellness of your hair to you?
 1. Extremely important
 2. Moderately important
 3. Slightly important
 4. Not at all
 - b. What features do you look for in a shampoo?
 1. Smoothing of hair
 2. Antidandruff
 3. Conditioning of hair
 4. To prevent hair fall

- c. Does the price of a shampoo affect your decision regarding the purchase of a shampoo?
 - 1. Yes
 - 2. No
- (B) Cream
 - a. How important is the wellness of your skin to you?
 - 1. Extremely important
 - 2. Moderately important
 - 3. Slightly important
 - 4. Not at all
 - b. What features do you look for in a cream?
 - 1. Anti-aging
 - 2. Smoothing of the skin
 - 3. Protecting
- (C) Does the price of a cream affect your decision regarding the purchase of a cream?
 - 1. Yes
 - 2. No
- 11. Do you prefer a homemade herbal shampoo over a commercial one?
 - a. Yes
 - b. No
- 12. Do you know about all herbal range?
 - a. Yes
 - b. No
- 13. How did you come to know about this product?
 - a. Media
 - b. Newspaper
 - c. Internet
 - d. Other sources
- 14. What is your gender?
 - a. Male
 - b. Female
- 15. What is your age group?
 - a. Teenager
 - b. Adults
- 16. Are you happy with the features associated with the herbal products?
 - a. Yes
 - b. No
- 17. Are herbal products easily available and accessible?
 - a. Yes
 - b. No
- 18. Would you suggest herbal products to your friends and relatives?
 - a. Yes
 - b. No
- 19. Do herbal products align with the values and beliefs of people?
 - a. Yes
 - b. No
- 20. Give your remark regarding the herbal products?
- 21. What do you like the most about this brand and why?

RESULTS AND DISCUSSION

The familiarity ranking of all the three herbal brands:

The familiarity ranking and scores of the three brands on a total score of 243 is given below. On the basis of the questionnaire, Himalaya scored first rank (with 144 score), Patanjali scored second rank (with 90 score), and Joves scored third rank (with 9 score).

S. No.	Brand	Score out of 243	Rank
1.	Himalaya	144	1
2.	Patanjali	90	2
3.	Joves	9	3

According to the above survey conducted in Kanpur regarding herbal products, we came across the following result that Himalaya was the most popular brand as compared to other brands such as Patanjali and Joves and other similar brands. The inclination of the respondents

toward a particular brand may be due to its no side effects, lesser cost, and more visible effects.

DISCUSSION

The study was to understand consumer perceptions of herbal products in Kanpur. The research study was carried out using three overall objectives. The data analysis and conclusion building method used for achieving the objectives of the research were done using ten sub-objectives.

The attributes which were suggested by the respondent on the use of herbal products were prepared from natural ingredients, free from any side effect, and also fit for health and chemical free. Most of the respondents mentioned that herbal products are made from natural ingredients so they faced no side effect. Purchase of herbal products primarily takes place on a monthly basis and used on a daily basis.

The second objective was related to familiarity and favorability of herbal brands, particularly Himalaya. The consumer segments of Himalaya products were from the middle-class sector; higher educated over age 36. These segments search for value for money, examine the product quality and performance. Himalaya is the market leader in familiarity as per respondents. However, there is high variability of Patanjali products among respondents who have used it.

Mass media, posters, banners, and retail stores are the major source of information about herbal products and brands. Majorly the purchase of herbal products takes place at retail stores and medicines shops.

Some herbal brands are also available at various medicine shops and can be purchased easily from there like Himalaya. Consumers generally consider all herbal products comparable in attributes. They purchase another company's product only in case of non-availability of their preferred brand. They do not take much pain to look for their favorite brands.

As most of the products are cost-effective and are purchased on a regular basis, the respondents have a much positive attitude toward

Table 1: List of phytochemicals having cosmetic potential [5]

S. No.	Phytochemical	Uses
1.	Arbutin	Skin whitening, melanin inhibiting
2.	Azulene	Colouring agent, antioxidant, and anti-inflammatory
3.	Carnosic acid	Antioxidant
4.	Glycyrrhizin	Reduces skin discolorations
5.	Glycyrrhetic acid	Anti-inflammatory
6.	Nordihydroguaiaretic acid	Anticancer and sunscreen
7.	Pycnogenol	Antioxidant
8.	Rutin	Antioxidant and emollient
9.	Squalene	Emollient, antioxidant, and immunostimulant

Table 2: Marketed preparations [23]

Product	Brand name	Company
Face wash	Deep cleansing apricot face wash	Himalaya herbals
Shampoo	Anti-dandruff shampoo volume and bounce	Himalaya herbals
Hair oil	Amla Brahmi hair oil	Ayur Herbals
Cream	Herbal massage cream	Ayur Herbals
Anti-aging cream	Dabur Uveda age renew 5 cream	Dabur

herbal products. All disagreed to have faced any side effect. Rather, they agreed that to use herbal products are because it is free from side effect and are prepared from natural ingredients.

CONCLUSION

There is no shortage in the demand for herbal products in the market. The consumers are concerned toward their health risk and harmful effect of chemical products which are forcing them to switch over to natural products. However, the most favorite brand of the consumers are based on its popularity, a survey through questionnaire was done in which it was found that Himalaya tops the popularity rank. There is high variability of Himalaya products among its users. People mostly used Himalaya brand products. They only switched over to another brand in case of non-availability. Marketing is considered to be the heartbeat of an organization. Therefore, we can say that the Himalaya firm has done its job excellently.

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CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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REFERENCES

- Pandey S, Meshya N, Viral D. Herbs play an important role in the field of cosmetics. *Int J PharmTech Res* 2010;2:632-9.
- Draeos ZD. Botanical antioxidants. *Cosmetic Dermatol* 2003;16:41-2.
- Ko RJ. Adulterants in Asian patent medicines. *J Med* 1998;339:847.
- Gediya SK, Mistry RB, Patel UK, Blessy M, Jain HN. Herbal plants: Used as cosmetics. *J Nat Prod Plant Resour* 2011;1:24-32.
- Kole PL, Jadhav HR, Thakurdesai P, Nagappa AN. Cosmetics potential of herbal extracts. *Natl Prod Radiance* 2005;4:315-21.
- Top 7 Advantages of using Natural Cosmetics.
- Kumar S, Swarankar V, Sharma S, Baldi A. Herbal cosmetics: Used for skin and hair. *Inventi Rapid Cosmeceuticals* 2012;4:1-7.
- Rabasco AA, Gonzalez RM. Lipids in pharmaceutical and cosmetic preparations. *Grasasy Aceites* 2000;51:74-96.
- Furmanowa M, Skopinska RE, Rogala E, Malgorzata H. Rhodiolarosea *in vitro* culture: Phytochemical analysis and antioxidant action. *Acta Soc Botanicorum Poloniae* 1998;67:69-73.
- Mukhtar H, Katiyar SK, Agarwal R. Green tea and skin anticarcinogenic effects. *J Invest Dermatol* 1994;102:3-7.
- Muley BP, Khadabadi SS, Banaase NB. Phytochemical constituents and pharmacological activities of *Calendula officinalis* Linn (*Asteraceae*): A review. *Trop J Pharma Res* 2009;8:455-65.
- Ozkur MK, Bozkurt MS, Balabanli B, Aricioglu A, Ilter N, Gurer MA, et al. The effects of EGB 761 on lipid peroxide leaves and superoxide dismutase activity in sunburn. *Photodermatol Photoimmunol photomed* 2002;18:117-20.
- Shea Butter. Available from: <http://www.sophimsheabutter.com/sheabutter.html>.
- Acquaye D, Marianna S, Letchamo W, Angers P, Simon J. Shea Butter, Agribusiness in Sustainable Natural African Plant Products. Available from: http://www.pfidnp.org/crop_specs/Sheabutter.pdf.
- Haghighi M, Tehranifar A, Nikbakht A, Kafi M. Research and current profile of Iranian production of Damask Rose (*Rosa Damascena* Mill). *Int Soc Horti Sci* 2008;769:449-55.
- Siddhuraju P. Antioxidant activity of polyphenolic compounds extracted from defatted raw and dry heated *Tamarindus indica* seed coat. *LWT* 2007;40:982-90.
- Tsuda T, Watanabe M, Ohshima K, Yamamoto A, Kawakishi S, Osawa T. Antioxidative components isolated from the seed of tamarind (*Tamarindus indica* L.). *J Agric Food Chem* 1994;42:2671-4.
- De M, De AK, Banerjee AB. Antimicrobial properties of star anise (*Illicium verum* Hook f). *Phytother Res* 1999;3:616-8.
- Kadam VS, Chintale AG, Deshmukh KP, Nalwad DN. Cosmeceuticals an emerging concept: A comprehensive review. *Int J Res Pharm Chem* 2013;3:308-16.
- Lucuma Uses. Available from: <http://www.familycontent.com/health/herbs/lucuma>.
- Leonel ER, Caren V, Vladimir S, Nava D, Lila MA, Ilya R. Antiaging and Wound Healing properties of *Pouteria lucuma* Seed Extract. Available from: http://www.lipochemicals.com/files/5758_WOUND_HEAL_ANTIAGING_PROP.pdf.
- Cosmetic Uses of *Lucuma* fruit. Available from: <http://www.cosmeticsdesign.com/Formulation-Science/Lucuma-fruit-hasantiaging-and-wound-healingpotential>.
- Joshi LS, Pawar HA. Herbal cosmetics and cosmeceuticals: An overview. *Nat Prod Chem Res* 2015;3:170.