

Traditional herbal cosmetics used by local women communities in district Attock of Northern Pakistan

Mushtaq Ahmad*, Mir Ajab Khan & Muhammad Zafar
Department of Plant Sciences, Quaid-I-Azam University, Islamabad, Pakistan
E-mail: mushtaqflora@hotmail.com

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Since ancient times woman have turned to the beautifies of nature to help or increase their own beauty. Even today, people especially in rural areas depend upon plants for traditional cosmetics. The research work is confined to herbal cosmetics with special reference of local communities of district Northern Pakistan. Through questionnaires, study was conducted in 20 villages of district Attock to collect information from local people for preparation, use of herbal cosmetics and their conservation. Indigenous data on 40 herbal recipes were collected from respondent informants. A total of 40 plant species belonging to 38 genera and 34 families were used in herbal cosmetics. Local communities, especially woman heavily use these herbal cosmetics for their beauty and believe that these are easily available, less expensive, and have no side effects.

Keywords: Herbal cosmetics, Traditional cosmetics, Pakistan

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International use of medicine and natural products is steadily increasing¹. In Pakistan, herbal medicine is referred as Unani System of Medicine². Natural herbs help in preserving and enhancing the beauty and personality of human beings. Natural cosmetic is general term applied to all preparation and external conditioning and beautifying the body. The study implemented more systematic questionnaire in order to understand the criteria being used by the local people of district Attock to characterize and select medical plants for the preparation and use of herbal cosmetics. The local ladies of the area are more dynamic and labourious in comparison to the gents. Regarding dress, the women preferred coloured clothes on special occasions. The women of all ages are much fond of ornaments. The younger girls and middle age women decorate their hairs with various flowers such as, *Rosa indica* (*ghulab*), *Jasminum grandiflora* (*motia*), etc. particularly during wedding and cultural festivals. The women are conscious about beauty and use herbal cosmetics in these ceremonies. The ethnobotanical survey for herbal cosmetics was carried out randomly in 20 remote villages of district Attock to document the indigenous knowledge of local women about plants used for cosmetics.

Methodology

Questionnaires were developed to document the indigenous knowledge of local women about the preparation and use of herbal cosmetics. Personal meetings were held to interview the 60 local women, 30 men, 10 herbal doctors (*hakims*) and herbal sellers. The ethnobotanical survey for herbal cosmetics was carried out randomly in 20 remote villages of district Attock. The key respondent was identified, asked about manners in which the herbal cosmetics were prepared and used. Before each interview consent was taken from local women to record the conversations and take photographs. The age of the local women, men, herbalists interviewed ranged between 20-104 yrs. However, local persons had a strong belief that efficiency of herbal therapy will be lost, if it is disclosed to strangers. Some of them hesitated to reveal the preparation of some of the herbal cosmetics they use. The specimens of medical plants collected were identified and deposited in Herbarium of Quaid-i-Azam University Islamabad³. The ethnobotanical inventory for herbal recipes consists of plant name, local name, family, parts used and indigenous herbal recipes (Table 1).

Results and discussion

Data on herbal cosmetics were investigated from local people of district Attock. In total of 40 plant

*Corresponding author

Table 1—Plants used by local women communities for herbal cosmetics

| Plant name | Local name | Family | Uses |
|---|----------------------|----------------|--|
| <i>Aloe vera</i> L. | <i>Ghewar gandle</i> | Liliaceae | Gel from the fresh leaves is applied on face especially during night time. It is good cleaning agent and effective remedy for freckles. |
| <i>Arachis hypogea</i> Linn. | <i>Moong phali</i> | Papilionaceae | Seed oil mixed with olive oil is applied on hand and against skin dryness. |
| <i>Artemisia scoparia</i> Waldst & Kit. | <i>Chawho</i> | Asteraceae | Fresh leaf juice is applied on wounds to expel pus and relief from sore. |
| <i>Azadirachta indica</i> A.Juss. | <i>Neem</i> | Meliaceae | Fruit powder mixed with rocket oil applied at the roots of hairs kills head lice. Leaf paste with 2-3 drops of rose extract is effective against freckles. Mask prepared from neem leaves, <i>Curcuma longa</i> , <i>multani mati</i> and few drops of lemon juice enhances beauty. Leaf decoction acts as antiseptic and is used to wash wounds. Leaf juice is applied on wounds. Its branches are used as tooth brush. |
| <i>Brassica campestris</i> L. | <i>Sarsoon</i> | Brassicaceae | Paste (<i>ubton</i>) prepared from mustard seeds powder, gram powder, barley and mustard oil is applied on face and whole body; rubbed and rinsed twice a week for cleansing. Paste prepared from mustard oil mixed with salt is applied on teeth has antimicrobial efficacy. One end of a cotton fiber rope is dipped into mustard oil and the other end is burned, which produces smoke. <i>Kajal</i> prepared from the smoke collected and mixed with honey wax is applied on eye lids. |
| <i>Brassica rapa</i> L. | <i>Shaljum</i> | Brassicaceae | Paste prepared from seeds powder, gram powder, and honey is effective for freckles. Feet dipped fruit decoction removes all marks on skin and it is effective against feet cracks. |
| <i>Canabius sativa</i> L. | <i>Bhang</i> | Canabianaceae | Leaf decoction is used for swollen gums. Paste prepared from the adventitious roots and olive oil is used to tight the breast. |
| <i>Carthamus oxycantha</i> M.bieb | <i>Polee</i> | Asteraceae | Paste prepared from seeds powder, and few drops of honey is effective to remove white spots of skin. |
| <i>Carum copticum</i> L. | <i>Ajwine</i> | Apiceae | Fried brown seeds tied in cotton bag is placed on eyes to relieve eye itching. |
| <i>Cicer arietinum</i> L. | <i>Channa</i> | Papilionaceae | Paste prepared from seeds powder, <i>Curcuma longa</i> , sandal bark powder and few drops of rose extract scrubbed on face has cleansing effect. |
| <i>Citrus lemon</i> Roxb. | <i>Lemon</i> | Rutaceae | Paste prepared from seeds powder, yoghurt and lemon juice applied on face and arms gives shine to skin. Shade dried fruit coat powder is applied for gum and toothache relief. |
| <i>Convolvulus arvensis</i> L. | <i>Laeli</i> | Convolvulaceae | Fresh leaf decoction is effective for abdominal worms. |
| <i>Cordia obliqua</i> Willd. | <i>Lasooray</i> | Boraginaceae | Leaves are brunt to get ash and is applied for mouth sores. |
| <i>Cucumis sativa</i> L. | <i>Kherra.</i> | Cucurbitaceae | Paste prepared from mashed fruit and few drops of honey gives smoothness to the skin. |
| <i>Cupressus sempervirens</i> L. | <i>Saroo</i> | Cupressaceae | Fresh fruit decoction is good for swelling and pain of gums. |
| <i>Curcuma longa</i> Burm. F. White. | <i>Haldi</i> | Zingiberaceae | Paste prepared from flour husk, <i>Curcuma longa</i> powder, lemon juice and cow's milk gives smoothness to the skin. Paste prepared from <i>Curcuma longa</i> , <i>Triticum aestivum</i> and milk is a good facial scrub. Paste prepared from these fruits fried in mustard oil is good antiseptic and effective for arthritis. |
| <i>Datura innoxia</i> Miller. | <i>Datura</i> | Solanaceae | Fresh leaves fried in oil are applied on skin sores for fast healing. Fresh leaves are also rubbed on forehead for relief from headache. Dried leaves are smoked as tobacco for asthma cure. |

Contd.

Table 1—Plants used by local women communities for herbal cosmetics—*Contd.*

| Plant name | Local name | Family | Uses |
|--------------------------------------|--------------------|----------------|---|
| <i>Desmostachya bipinnata</i> L. | <i>Dub grass</i> | Poaceae | Resulting powder from burnt <i>Dub</i> grass roots mixed with milk is effective for arthritis. |
| <i>Eruca sativa</i> Miller. | <i>Tara mira</i> . | Brassicaceae | Oil applied on hairs twice a week keeps hairs black for long time; if smelled during flue, acts as an effective cure. |
| <i>Ficus bengalalensis</i> L. | <i>Bohar</i> | Moraceae | Dried leaves are applied on wounds; bark extract is used for foot cracks. Milk extracted from aerial parts specially leaves is externally applied for maintenance of female breast. |
| <i>Foeniculum vulgare</i> L. | <i>Sounf</i> | Apiaceae | Cooled seed decoction is poured in eyes for effective eye sight. |
| <i>Fagonia indica</i> Burm F. | <i>Tumayan</i> | Zygophyllaceae | Fresh leaf powder is effective for cancer at initial stages. |
| <i>Juglans regia</i> L. | <i>Akhrote</i> | Juglandiaceae | Dried plant bark applied on teeth gives brightness to the teeth. Paste prepared from dried fruit powder and rose extract applied on face is effective against acne marks. |
| <i>Lawsonia innermis</i> L. | <i>Mehndi</i> | Lythraceae | Paste prepared from plant leaves, <i>Dodonea viscosa</i> (<i>sanatha</i>) and mustard oil is applied on hairs as hair gel. |
| <i>Melia azedarach</i> L. | <i>Derak</i> | Meliaceae | Decoction prepared from leaves and fruits is taken early in the morning as blood purifier and cure for acne. |
| <i>Mentha lonifolia</i> L. | <i>Podena</i> | Lamiaceae | Powder of <i>Mentha longifolia</i> , <i>Terminalia chebula</i> , <i>Zanthoxylum alatum</i> and <i>Migela sativa</i> is effective for stomach disorders. |
| <i>Opuntia dellini</i> Haw. | <i>Thor</i> | Cactaceae | Latex of plant glued with cloth is tied on wound to expel pus and fast wound healing. |
| <i>Papaya carica</i> | <i>Papeeta</i> | Piperaceae | Paste prepared from fruit, rose extract and egg white is applied externally as an effective skin tonic. |
| <i>Phoenix sylvestris</i> (L.) Roxb. | <i>Khajoor</i> | Arecaceae | Paste prepared from dried fruit and mustard oil is effective against tooth worms and toothache. |
| <i>Pisum sativum</i> L. | <i>Muttur</i> | Papilionaceae | Paste prepared from shade dried seed powder in lemon juice is applied on face to give fairness. |
| <i>Prunus amygdalus</i> | <i>Badaam</i> | Rosaceae | Facial mask prepared from seed powder, gram powder, few drops of rose extract and honey is effective against skin freckles. |
| <i>Pyrus malus</i> | <i>Saeb</i> | Rosaceae | Paste prepared from fruit mixed with honey and rose extract applied on face gives fairness to skin. |
| <i>Punica granatum</i> L. | <i>Anar</i> | Punicaceae | Burnt stamens ash is used in stopping of bleeding from the nose. |
| <i>Ricinus communis</i> L. | <i>Arund</i> | Euphorbiaceae | Oil applied on eye lashes enlarges the eye lashes. |
| <i>Sesamum indicum</i> L. | <i>Till</i> | Pedaliaceae | Decoction of fruits of <i>Sesamum indicum</i> , <i>Sapindus orientalis</i> (<i>Retha</i>) and <i>Phyllanthus emblica</i> (<i>Amla</i>) is used to wash hairs. It makes hairs silky and beautiful. The fruit fried in mustard oil until browned is effective for healing wounds. |
| <i>Solanum nigrum</i> L. | <i>Kach mach</i> | Solanaceae | Fruit decoction is used against gastric problems and constipation. Fresh leaf decoction is used to wash swelling of hands and feet. |
| <i>Solanum surratense</i> Burm.F. | <i>Mokari</i> | Solanaceae | Decoction of seeds mixed with spices is effective for arthritis. Fruit is fried on fire until smoke is produced; smoke sucked through pipe is effective for tooth worms. |
| <i>Tribulus tristris</i> L. | <i>Bhukhra</i> | Zygophyllaceae | Fruit powder is taken once a day is effective cure of leucorrhoea. |
| <i>Trigonella foenum-graecum</i> L. | <i>Methray</i> | Papilionaceae | Hairs washed with seed decoction gives shines to the hairs. Paste prepared from dried leaves and rose extract removes face freckles. |
| <i>Vitis vinifera</i> L. | <i>Mava</i> | Vitaceae | Fruit browned on low fire and tied on the wound is effective for healing wounds. |

species belonging to 38 genera of 34 families were found to be commonly used for cosmetics. Man has apparently always made use of plants, animals and minerals in his diet and health. The cultivation and use of herbs is as much a reality today as it has been

since the dawn of history⁴. The unrecorded knowledge was handed down to generations by word of mouth. Our ancestors were deeply respectful of herbs and held plants in great esteem⁵. Today, approximately 25% of all prescription drugs are derived from plants.

Research on medicinal plants of Pakistan in the last 50 yrs points to a rich resource base, spread over a wide range of ecological zones, with estimates of number of plant species having medicinal properties varying from 3,200 species⁶.

Approximately, 500 species are known for their active constituents from research conducted in Pakistan and elsewhere, and around 250-300 species known to have entered the herbal markets of Pakistan⁷. It has been reported that approximately 400-600 medicinal plants are more frequently used in herbal preparations. Though several species, which are common in certain areas and are known to be used locally in traditional preparations, have not been scientifically investigated for wider use⁸. There is need to collect and compile indigenous knowledge about plants, especially among tribes (*Pathan, awan, gujars, shah*, etc.) living in western mountains, northern parts of Pakistan and Potohar region⁹. Keeping in view the high demands of herbal cosmetics in the society, the findings are results of indigenous knowledge of the local people of district Attock about the uses of medicinal plants used in cosmetics. Use of Plants varies from area to area. Instant mask prepared from dried and grounded leaves of *Azadirachta indica* A. Juss. and mixed with three teaspoons of *Curcuma longa*, four teaspoons of *Multani matti* and few drops of lemon juice enhances beauty. Indigenous knowledge of local women (60%), elder men (30%), and herbalists (*Hakeem*, 10%), respectively was sought. According to local people, the best season for collection of medicinal plants for herbal cosmetics was found to be spring.

Conclusion

Since most of the part of district Attock is in Potohar region, has a lot of natural resources. There is clear relationship between the local people with

natural resources. Local people of area have good knowledge of utilisation of plants for cosmetic purposes. The knowledge is likely to be lost because of interference of modern cultural changes. Therefore, efforts were made to understand the indigenous knowledge about the use of herbal cosmetics. The utilisation of indigenous herbal cosmetics will increase the importance of local cosmetic industry. In view of the research work on herbal cosmetics and medicinal plants, research, development and conservation efforts should be focused on these plants. For sustainable and long term conservation of natural resources of the area, there is need to actively involve the local communities in evaluation, planning, implementation and monitoring process.

References

- 1 Zhang X, Traditional Medicine and WHO, *Hamdard Medicus*, 39(3), (1996), 102-103.
- 2 Ahmad M, *Ethnomedicinal and taxonomic studies of economically important plants of Tehsil Attock*, (MPhil Thesis, Department of Biological Sciences, Quaid-e-Azam University, Islamabad, Pakistan), 2003, 205-207.
- 3 Nasir YJ & Rafique RA, *Wild flowers of Pakistan*, (Oxford University Press, Karachi), 1995, 181-183.
- 4 Ahmad H & Sirajuddin, *Ethnobotanical profile of Swat*, In: Proc 1st conversion, edited by Shinwari ZK & Khan AA, (National Herbarium NARC Islamabad, Pakistan), 1996, 2062-2064.
- 5 Chaudhary II, Distribution of some of important medicinal plants of West Pakistan, *Pak J Sci Ind Res*, 4 (1961) 207-211.
- 6 Ansari KA, Malik AR & Mahar AQ, Survey of medicinal plants in district Khairpur, *Ann J Res Sci Sindh*, 2 (1993) 129-126.
- 7 Ali M & Ansari SH, Studies on some herbal drugs used as hair tonic, *Hamdard Medicus*, 11(2) (1998) 107-108.
- 8 Kohli KN Ahmed & Baboota S, Herbs in cosmetics, *Hamdard Medicus*, 16(4) (2004) 76-79.
- 9 Leporatti ML & Latanzi E, Traditional phytotherapy on coastal area of Makran (southern Pakistan), *Fitoterapia*, 65(2) (1994) 158-161.