

Medicinal Plants Utilized by Rural Women of Rajasthan

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Medicinal plants play a vital role in providing health care to human beings since the dawn of civilization. These plants have always been a basic resource for human health. Medicinal plants are those plant species, which are commonly used in the treatment and prevention of specific ailments and diseases. The World Health Organization (WHO) estimated that 80% of the population of developing countries rely on traditional medicines, mostly plant drugs, for their primary health care needs. Demand for medicinal plants is increasing in both developing and developed countries due to growing recognition of natural products, which have no side effects, are non-narcotic, easily available at affordable prices, and sometimes the only source of health care available to the poor. Medicinal plants have traditionally occupied an important position in the socio-cultural, spiritual, and medicinal arena of rural and tribal lives of India.

It is evident that the Indian people have tremendous passion for medicinal plants and they use them for wide range of health-related applications such as relief from common cold, memory improvement, treatment of poisonous snakebites, cure for muscular dystrophy, and enhancement of the body's general immunity. Therefore, an attempt was made to explore indigenous

practices using medicinal plants followed by rural women of Rajasthan for health security.

Methodology

The study was conducted in five districts (Jodhpur, Jhalawar, Bhilwara, Ajmer, and Sikar) covering five major agroclimatic zones of Rajasthan. The data was collected from 300 rural women in five villages (60 from each village) through participatory rural appraisal (PRA) technique that included conversations, key informant interviews, group discussions, and observations. During data collection it was found that women used many common plant ingredients such as mint, date, ginger, turmeric (Fig. 1), coriander, Indian aloe, etc. for the treatment of common ailments. Some fruits were also used (Fig. 2). The method of preparing the medicine and mode of application were also noted. The identified practices were then documented after being scientifically

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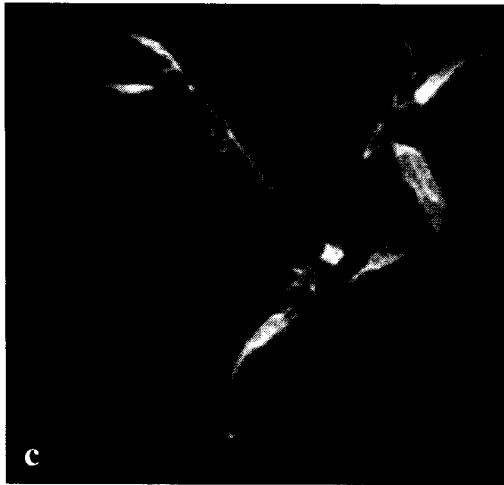
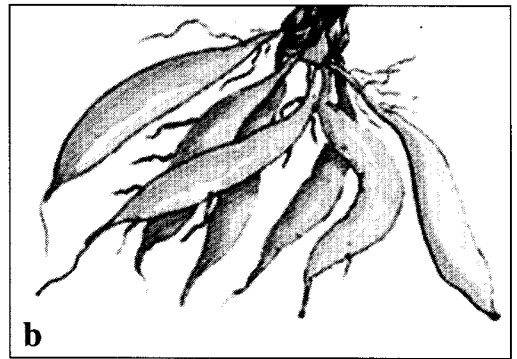
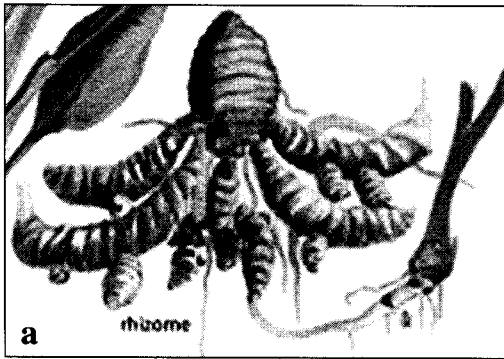


Figure 1. Plants used for common ailments: (a) *haldi* (*Curcuma domestica*); (b) *shatavar* (*Asparagus racemosus*); (c) *bhringraj* (*Eclipta prostrata*); and (d) *aakda* (*Calotropis gigantea*).

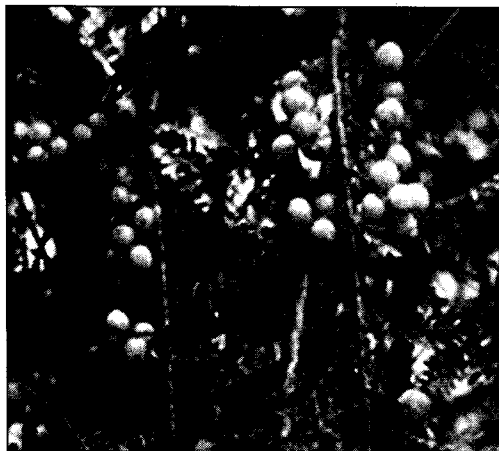


Figure 2. Fruits used for common ailments: (a) *amla* (*Emblica officinalis*); and (b) *anar* (*Punica granatum*).

validated by Ayurvedic doctors as well as from the available literature.

Indigenous remedies

The major findings for some diseases are given in Table 1.

Conclusion

Medicinal plants constitute a vast, undocumented, and overexploited economic

resource and they are the principal health care resource for the majority of the people. Communities and herbalists use medicinal plants in promoting and maintaining health of majority of population of most countries in the South. Demand of herbal medicines in the North has led to significant changes in traditional patterns of trade of medicinal plants. Thus efforts should be made to popularize such practices for future generations by establishing herbal gardens.

Table 1. Indigenous remedies using plant ingredients for treatment of some common ailments.

Plant name	Properties	Scientific basis of use	Method of preparation	Dose
Toothache				
<i>Haldi (Curcuma domestica; turmeric)</i>	Anodyne Anti-inflammatory Anti-bacterial	Relieves pain Reduces swelling Prevents bacterial infections	Boil water with ½ tsp turmeric powder and a pinch of salt.	Gargle with this liquid thrice a day.
<i>Jamphal (Psidium guajava; guava)</i>	Anodyne Anti-inflammatory	Relieves pain Reduces swelling	Boil 5–6 fresh leaves of guava in 500 ml water for 5 minutes and strain.	Gargle with this boiled water twice a day for three days.
<i>Jeera (Cuminum cyminum; cumin)</i>	Anodyne Anti-inflammatory Anti-bacterial	Relieves pain Reduces swelling Prevents bacterial infections	Take 2 tsp cumin seeds and boil in 200 ml water. Grind 10 g cumin seeds and 10 g rock salt to fine powder.	Gargle with this water 3–4 times a day. Rub teeth with this powder twice a day till the pain subsides.
<i>Limda (Azadirachta indica; neem)</i>	Anodyne Anti-bacterial	Relieves pain Prevents bacterial infections	Take a 6-inch piece of neem stem and crush one end with teeth.	Place it in tooth cavity till pain reduces.
Eye infection				
<i>Shatavar (Asparagus racemosus)</i>	Ophthalmic Cooling Anodyne	Reduces irritation and swelling in eyes Provides coolness to the eyes Relieves pain	Boil 20 g fresh root of <i>shatavar</i> with 1 L of water till ¼ quantity remains.	Drink one cup of the boiled liquid twice a day.

continued

Table 1. *continued*

Plant name	Properties	Scientific basis of use	Method of preparation	Dose
<i>Til (Sesamum indicum; sesame)</i>	Astringent	Provides coolness to the eyes	Heat 10 g gingly oil with 5 g of dry gigantic swallow-wort leaves for 2 minutes. Cool and then strain the oil.	Put one drop of the oil in affected eye twice a day.
	Ophthalmic	Reduces irritation and swelling in eyes		
<i>Amla (Emblica officinalis; Indian gooseberry)</i>	Astringent	Provides coolness to the eyes	Soak 50 g fresh <i>amla</i> fruits in water. Grind the fruits and extract juice.	Put 2–3 drops of the juice in both the eyes thrice a day for 3 days.
	Anti-inflammatory	Reduces inflammation in the eyes		
	Ophthalmic	Reduces irritation and swelling in the eyes		
<i>Anar (Punica granatum; pomegranate)</i>	Astringent	Provides coolness to the eyes	Extract juice from one small fresh fruit of <i>anar</i> and strain it. Make decoction from dried <i>anar</i> fruit peels and strain it.	Put 2–3 drops of the juice in each eye for 7 days. Put 2–3 drops of decoction in each eye for 7 days.
	Ophthalmic	Reduces irritation in the eyes		
Fever				
<i>Kali mirch (Piper nigrum; black pepper)</i>	Alexeteric	Prevents infection Avoids regular recurrence of fever	Crush 10–12 leaves of <i>tulsi (Ocimum sanctum; holy basil)</i> . Mix ½ tsp black pepper powder and 1 tsp honey.	Lick one tsp of the mixture twice a day.
	Anti-menses			
<i>Limda (Azardirachta indica; neem)</i>	Anti-menses	Avoids regular recurrence of fever	Extract juice from 50 g of neem leaves. Mix in a bowl of water.	Take 1 cup of the extract daily till the fever subsides.
	Anodyne	Relieves pain		
	Anti-viral	Effective in malarial and intermittent fever		
<i>Atis (Aconitum heterophyllum)</i>	Appetizer	Increases appetite	Grind 1 g <i>atis</i> root to fine powder. Mix in one glass of water or milk.	Drink 1 tsp of the mixture 3–4 times a day for 5 days, till fever subsides.
	Febrifuge	Controls fever		
	Anti-menses	Avoids regular recurrence of fever		
Insect bite <i>Bhringraj (Eclipta prostrata)</i>	Alexeteric	Prevents infection	Make paste of 3–4 roots of <i>bhringraj</i> . Grind one small onion and extract juice. Mix the paste and juice.	Apply this paste on the affected area.
	Anodyne	Relieves pain		
	Anti-inflammatory	Reduces swelling		

continued

Table 1. *continued*

Plant name	Properties	Scientific basis of use	Method of preparation	Dose
<i>Aakda</i> (<i>Calotropis gigantea</i> ; madar)	Astringent	Provides cooling effect	Take out the milk by splitting the leaves of <i>aakda</i> .	Apply the milk immediately on affected area.
	Emetic	Causes vomiting		
Hair fall				
<i>Til</i> (<i>Sesamum indicum</i> ; sesame)	Hair restorer	Promotes hair growth and blackens the hair	Take 1 kg gingelly oil, 2 tsp neem leaves, and 2 tsp lemon juice. Mix them well.	Apply the mixture on the hair twice a week.
	Hair tonic Astringent	Acts as tonic Provides coolness and strength to the hair		
<i>Amla</i> (<i>Emblica officinalis</i> ; Indian gooseberry)	Astringent	Provides cooling effect	Take 20 g dry powder of <i>amla</i> . Mix it with 50 g curd.	Apply the mixture once a week on the hair.
	Trichogenous	Stimulates the growth of hair and helps in blackening of hair		
<i>Rittha</i> (<i>Sapindus emarginatus</i> ; soapnut)	Alexeteric	Prevents infection	Take 4–5 fruits of soapnut and 4–5 pods of <i>shikakai</i> (<i>Acacia rugata</i> ; soap pod). Soak them in a glass of water overnight. Boil these in the morning for 10 minutes.	Wash hair with this liquid once a week.
	Demulcent Astringent Cleanser	Soothens the skin Provides coolness Cleans hair and makes it shine		
	Hair restorer	Restores the growth of hair		
	Trichogenous	Promotes hair growth		
<i>Bhringraj</i> (<i>Eclipta prostrata</i>)	Trichogenous	Helps in blackening and strengthening of hair	Take 2 g each of dry <i>amla</i> , black sesame, and <i>bhringraj</i> . Grind to fine powder. Mix 2 g sugar in the powder. Extract juice from 10–12 fresh leaves of <i>bhringraj</i> .	Take one tsp powder with milk daily for one month. Apply the juice on the hair. It stops hair fall and makes the hair strong.
	Hair tonic	Acts as a hair tonic		
Dandruff				
<i>Limda</i> (<i>Azadirachta indica</i> ; neem)	Demulcent Astringent	Soothens the skin Provides cooling effect	Grind 20 g fresh leaves of neem with half glass of water to make paste.	Apply the paste on the hair and rub thoroughly once a week.
	Hair tonic	Acts as tonic		

continued

Table 1. *continued*

Plant name	Properties	Scientific basis of use	Method of preparation	Dose
<i>Mehandi (Lawsonia inermis; henna)</i>	Refrigerant Trichogenous	Provides coolness Stimulates hair growth	Grind 100 g fresh leaves of henna to a paste by adding water.	Apply the paste on the hair regularly once a week.
	Hair tonic	Avoids premature graying of hair. Promotes blackening and strengthening of the hair	Take 4 heaped tablespoons powder of henna and 1 tsp dry powder of <i>amla</i> . Mix in two glasses of water. Soak overnight in an iron vessel.	Apply this mixture to the scalp in the morning and keep for 2 hours.
Scabies				
<i>Limda (Azadirachta indica; neem)</i>	Astringent	Provides cooling effect	Take 250 g dry leaves of neem and grind to powder.	Take ½ tsp powder orally by adding sugar with hot water daily for 10 days.
	Depurative Demulcent Anti-menses	Purifies blood Soothes the skin Avoids regular recurrence of disease	Take 25 g bark of neem. Boil it in one glass of water for 5 minutes.	Take ½ cup of the decoction twice daily after adding a little sugar for 10 days.
	Alexetric	Prevents infection	Extract juice from fresh neem leaves. Mix turmeric powder and a small quantity of mustard oil to make paste. Make ash by burning dry bark. Mix it in coconut oil to form paste.	Apply the paste over the affected areas and wash after 45 minutes. Repeat it for 7 days.
				Apply the paste over the affected areas and wash after 45 minutes. Repeat it for 7 days.
<i>Dhak (Butea monosperma; flame of the forest)</i>	Astringent	Provides coolness to the skin	Grind 20 g <i>dhak</i> seeds with lemon juice to make a fine paste.	Apply this paste regularly till the problem cures.
	Emollient	Softens the skin		
	Anodyne Anti-inflammatory	Allays pain Reduces inflammation		
	Depurative	Purifies blood		