

Indigenous use of locally available plants in common health problems



Home Science

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ABSTRACT

The present study aimed in exploring and validating indigenous technological knowledge of rural women in different health problems. Participatory rural appraisal techniques (PRA) and focused group discussion were used to collect and document the indigenous practices with expert's opinion were taken to validate the practices on three point continuum i.e. scientific, unscientific and unknown. The result shows that rural women were using different plant parts which are locally available in their surrounding and majority of the practices have scientific base as per experts. Thus it is the need of the hour to disseminate the indigenous practices which have scientific rationale to other parts of the country for mass scale adoption through proper interventions.

Introduction

Rural women of Kumaon region have their own local specific indigenous knowledge and this stored knowledge provides locally manageable, sustainable and cost effective survival strategies for rural community, especially to the poor people of Kumaon hills. In rural Himalayan regions, there is no proper and adequate facilities of treatment of common human problems and majority of rural women constitute a storehouse of indigenous knowledge for curing different health problems. The people of far-flung rural areas still depend to a large extent upon plants and household remedies for curing health problems. The folk knowledge of ethno medicine and its significance has been identified by the traditional communities through a process of experience over hundreds of years. The present study tries to explore how the indigenous medicinal system is being able to serve the local people, how it contributes to their scarce economy and how it helps conserve bio-resources in around the community. Hence their identification, validation and documentation can help to pass this knowledge to the future generations for mass scale adoption.

Material and methods

The present study was conducted in Bageshwar district of Uttarakhand state to study and explore the indigenous practices among rural women. Two villages' i.e. *Garkhet* and *Tilsari*, were selected from *Garur* panchayat samitie. From each village 30 rural women, above 45 years of age were interviewed with the help of interview schedule and PRA Technique. Thus, the total sample consisted of 60 rural women. The questions were asked in local dialect (*Kumaoni*) consisting of background information and indigenous knowledge on different health problems. Data was collected from rural women with the help of participatory techniques and focused group discussions regarding different body parts pain. For taking expert opinion either the indigenous practices are scientific or unscientific, four experts i.e. two ayurvedic doctor and two scientist from CIMAP (Central Institute of Medicinal and Aromatic plants, Bageshwar, Uttarakhand) were chosen. The very nature and stage of research on indigenous knowledge system guided to qualitative approach supplemented with quantification wherever required or possible.

Results and discussion

Different body Parts pain

- ❖ **Stomach pain:** Rural women of Kumaon region used to take dry leaves of *Nirbisi* (*Delphinium denudatum*) orally with milk during stomach pain. The experts' supports this practice, as the plant is bitter, cooling, astringent, anodyne, aphrodisiac, anti inflammatory and used in stomach pain.
- ❖ **Rheumatic pain and Swelling:** Regarding rheumatic pain the rural women of Kumaon Himalayan gently rubbed the leaves of *Bichhu* (*Urtica dioica*) on the joint or muscle having pain. Rural women stated that *Bichhu* leaves have some kind

of medicinal properties, which reduced the pain. Experts also support that *Urtica dioica* is thermogenic in nature and have medicinal properties that is helpful in reducing joint, sciatica, gout and rheumatic pains. Apart that rural women also apply the paste of *Bichhu* grass cooked with mustard oil (100 ml) and garlic (only *gathiya lahasoon* is taken) (8-10 splits) till dark black colour is appeared Experts expressed that all three are thermogenic, anti-inflammatory and anodyne in nature and increases the blood circulation in the body hence relief the joint pain. *Ayurveda* literature also support that mustard oil has selenium and magnesium content which lend it **anti-inflammatory and heat producing properties.**

A similar study conducted by Semwal *et al.* (2010) also reported alike that bulb of *Allium sativum* L. (*Lahsun*) is extracted and mixed with mustard oil and boiled is applied externally in case of arthritis and joints pain further also reported that *Urtica dioica* L. (*Kandali*) dry leaf extract is taken orally; also useful during joints and muscular pain.

❖ **Tooth pain:** Information related to indigenous practices prevalent among rural women to cure tooth pain showed that majority of the respondents placed the garlic (*Allium sativum*) split in the tooth cavity to relief from pain whereas others used *Timur* (*Zanthoxylum alatum*) bark and seed for alleviating toothache. Respondents crushed the seeds, grind the bark into a thin paste, and directly apply the paste on affected part of the teeth. Experts support this practice as fruit and bark is aromatic, anti bacterial, anti fungal and used in making tooth powders.

Semwal *et al.* (2010) in a study also reported the same that *Zanthoxylum armatum* (*Timru*) seed paste and twig/bark is used for teeth cleaning, toothache and pyorrhoea.

❖ **Ear pain:** Regarding ear pain rural women poured two drops juice of crushed leaves of *Gewain* (*Solanum nigrum*) in the ear for alleviating the pain. Experts also support this practice as it is anti-inflammatory, anodyne and anti-septic in nature whereas rural women also crushed the leaves of *Hazaree* (*Tage-tus miniata*) plant and two drops of juice is poured in the ear for relieving pain. Experts support this practice as leaves are styp-tic, carminative, vermifuge and used for earache. In ayurveda it is described that warm the juice of leaves and pour 4-4 drops two times a day is beneficial in ear disorder (Otaglia).

❖ **Head pain:** Rural women reported that chewing 2-3 *Brahmi* (*Centella asiatica*) leaves during headache. Experts considered the practice of chewing *Brahmi* leaves in headache as scientific. It act as a local stimulant and has cooling properties, whereas *ayurveda* literature support this practice as *Brahmi* plant is cooling, hypotensive, central nervous system relaxant, sedative, brain tonic and improves memory. Besides that rural women

reported the use of *Titpatee (Oxalis corniculata)* leaves paste on the forehead. Experts reported that *Titpati* has cooling and refrigerant properties.

❖ **Eye pain:** Regarding weakness or stress in the eyes, rural women used to take fine paste of *Baheda (Terminalia bellerica)* by adding water in it. Experts support that *Baheda* has great medicinal properties and which is helpful for eye disorders. *Baheda* is traditionally combined in *ayurveda* with the fruits of *Amla (Phyllanthus emblica)* and *Harada (Terminalia chebula)* to create the famous Indian formula known as "*Triphala*" ('three fruits').

❖ **Stone pain:** For reliving stone pain rural women use to take mixture of *Hordeum vulgare*, *Eleusine coracana* and Barnyard millet flour then boiled in 500 ml of water for 5 minutes. Respondents stated that this mixture is consumed daily for releasing stone pain. Experts suggested that there is need of research to prove this practice.

Conclusion

Despite the development of rural health services, rural women are still using their local indigenous knowledge to a large extent for treatment of common health problems and due to the distance of the settlement from the urban market and lack of modern health care practices, rural women of Kumoan himalayan is rich in indigenous health care knowledge and they believe that indigenous methods are claimed to be highly effective in keeping health as well as in curing common ailments. Thus, the importance of upholding indigenous knowledge and its cultural environmental resources is vital, particularly in the context of globalization and increased demand of natural resources worldwide. Hence, there is an urgent need of detailed investigation, documentation and validation of indigenous knowledge about health care practices, which is being passed orally from generation to generation.

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