

# Indigenous ethnobotanical remedies practiced to cure feminine diseases in tribal communities of Kashmir Himalayas

Hamayun Shaheen<sup>1,2</sup>, Muhammad Ejaz Ul Islam Dar<sup>2</sup>, Zahid Ullah<sup>1</sup>

## \*Corresponding author:

Hamayun Shaheen

<sup>1</sup>Department Of Plant Sciences, Quaid-I-Azam University Islamabad, Pakistan

<sup>2</sup>Department Of Botany, University Of Azad Jammu and Kashmir Muzaffarabad, Pakistan

## Abstract

Women's reproductive cycles are very clinical and complex, having unwanted medical conditions. Himalayan Women have been trying to enhance their fertility and regulate their reproductive cycles throughout the history by practicing ethnomedicinal remedies, as they are reluctant to expose their feminine problems to doctors due to psychological, social and religious barriers. Present study reveals the ethnomedicinal recipes practiced by mountain women in Kashmir Himalayas for feminine diseases. Data was acquired by planned biological inventories, exclusive interviews and direct observations in the field. A total of 36 plants belonging to 27 families were recorded being practiced for feminine diseases in 43 different recipes. Major feminine diseases treated by ethnomedicine were menstrual disorders (32%); birth pain and bleeding (16%); Contraception and abortion (16%); enhancing fertility (9%), Sexual potency (9%) and Lactation (7%). Major plant parts utilized in recipes were roots (32%), whole plant (16%), leaves (16%), Seeds (9%), latex (7%) and fruit (7%). Decoctions (41%), raw plant parts (24%) and extracts (13%) were prevalent modes of ethnomedicinal remedies. 79.6% respondents were effectively involved in ethnomedicinal practices to treat feminine diseases. An increasing trend towards modern medical treatment was observed in younger generation correlated with higher education level. Paper discusses the ethnomedicinal treatment of feminine diseases in qualitative as well as quantitative methodology and elaborates how the local folklore can be used at regional levels to add new cures in feminine pharmacopeia.

**Keywords:** Ethnomedicine, Feminine diseases, Kashmir, Himalayan Women, decoction.

## Introduction

Himalayan regions are blessed with a great number of plant resources and are most important data base and practicing centers of indigenous folklore and its utilization. The earliest historical records of utilization of plant/herb resources as medicine in Himalayas are found in the 6,000 years old texts of the *Rigveda* [1], *Atharveda* (2000-1000 BC) and *Auryveda* (600-100 BC) [2].

Being Himalayan mountain women is very special, having a very tough, hardworking and unhygienic life style. Women's reproductive processes like menstruation, pregnancy, menopause, are very clinical and complex as compared to men [3]. These reproductive processes always cause unwanted medical conditions like PMS, mood swings and fertility issues. World Health Organization reports reveal that about 350 million cases of feminine diseases occur each year [4]. Women have been trying throughout history to enhance their fertility and control their reproductive cycle. About 80% of the rural population of Kashmir Himalayas is reported to use herbal remedies for their primary health care [5]. An increasing trend of practicing fertility-enhancing ethnomedicinal recipes has been observed in women [6]. Because of immediate and cheap therapies and quality products, medicinal plants are usually the first priority of local women in Himalayan

region as compared to western pharmaceuticals, being costly, unaffordable and in most cases unavailable [7]. One of the most important reasons for ethnomedicine practice and preference is that they are relatively safer than synthetic therapeutics, and provide promised and profound benefits [8]. Ethnomedicinal investigations reveal the use of many herbal remedies as contraceptives, abortifacients, emmenagogues or oxytocics, particularly to promote labour. Investigations have revealed that plants provide the active ingredients for 50% allopathic (Western) drugs [9]. The Natural Products Alert database had recorded 4,410 plants used as emmenagogues, 2,630 as abortives and 1,249 as contraceptives [10]. Investigations reveal that in case of pregnancy and birth, women do not feel well served in modern medical treatments even in developed countries [11]. Younger women however are found more in favor of medical treatment, where as a greater proportion of elder women rejected medical interference in contraceptive decisions.

Studies have revealed that Himalayan region is home to over 10,000 species of medicinal and aromatic plants [12]. The temperate and alpine zones harbor highly valued medicinal plants [13]. Western Himalayan region alone is a home to about 18,440 species of medicinal plants [14]. In developing Himalayan communities, the indigenous knowledge of plant resources is

predominantly used for utilization of plants for various purposes, and high priority needs to be given to its documentation.

Due to rapid and complex socioeconomic, cultural, technological and environmental transformations, indigenous knowledge of ethnomedicine is decreasing day by day. Local folklore needs to be documented and preserved before it is lost forever. There has been no systematic effort in the area to record this very important aspect of feminine diseases treated by ethnomedicine till now. Objectives of the study included documentation of ethnomedicinal remedies being used to treat and cure feminine diseases in western Himalayan region of Kashmir.

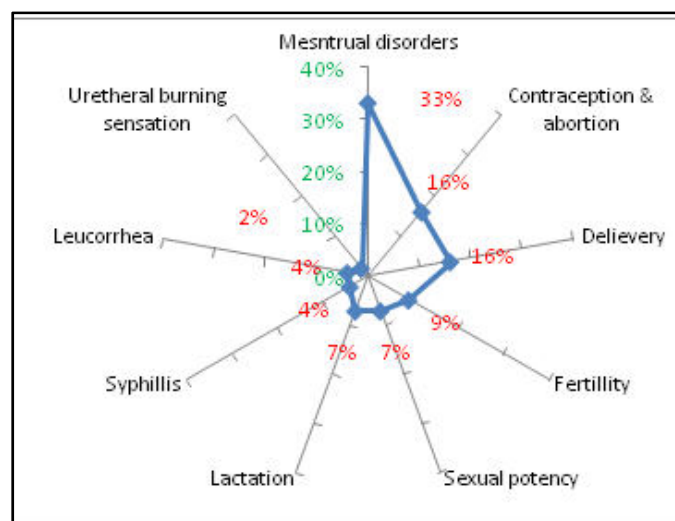
## Materials and Methods

District Bagh lies in the western Himalayas, having subtropical to moist temperate vegetation [15]. Expeditions were conducted during spring and summer 2008-9 using extensive and intensive surveys in accordance with specific procedures for the locality [16, 17]. Ethnobotanical information was gathered by making visits to settlements within the study area including Sairi, Barikot, KharalMaldiyalan, Raikot, NarrSher Ali Khan, Ratnoi, Swanj, Chowki andBaniMaldara. 20 Women in each of 9 villages with different socio-economic background, education level and age groups were interviewed by means of questionnaire method. As a whole 360 women were interviewed, 180 in 20-40 whereas other 180 in 40-60 years age group. Main points included in the questionnaire were about common feminine diseases; importance given to ethnomedicine for feminine diseases; methods of preparing ethnomedicinal recipes; performance of ethnomedicine against the feminine diseases; identification, vernacular names, collection and preservation practices of medicinal plants by the locals. Elder women were concentrated more due to their regular and strong relationship with indigenous knowledge practices. Medicinal plants were collected from the surrounding forests and alpine pastures through random walks. The specimens were collected, dried, pressed and brought to Herbarium of Quaid-I-Azam University Islamabad, Pakistan. The specimens were then identified through available literature and preserved specimen in the herbarium [18, 19].

## Results

A total of 36 plant species belonging to 27 families were recorded being practiced for feminine diseases. Asteraceae (4 members), Liliaceae (3), Moraceae (2), Malvaceae (2), Apiaceae (2) and Solanaceae (2) were the prominent plant families recorded from the area. A total of 43 ethnomedicinal recipes were recorded in the area, practiced by local women for feminine disease. In most of the preparations roots (32%) were utilized followed by leaves (16%), whole plant (16%), seeds (9%), gum & latex (7%), fruit (7%), bark (4%), bulb (4%), rhizome (2%) and flower (2%) (Fig 2). The most prevalent method of ethnomedicinal remedies preparation in the area was decoction (41%), followed by raw plant parts (24%); extract (13%); powder (9%); soup (7%); and paste (5%). 81% of recipes were taken orally whereas 19% had external applications.

32% recipes were used to treat menstrual disorders including menstrual irregularities, excessive bleeding and pain. 16% remedies were used to treat birth pain and bleeding; 16% for contraception and abortion; 9% for fertility and conception; 9% for sexual potency and vigor; 7% for increased lactation; 4% for syphilis; 2% for leucorrhoea and 1% for burning sensation in urethra (Fig 1). It was observed that several species were used against same ailment and similarly sometimes same herb was used against different ailments. The detailed methods of ethnomedicinal recipe preparation and utilization practices of indigenous plants in western Himalayas are listed below.



**Fig 1: Major feminine diseases treated by ethnomedicine in Kashmir Himalayas**

## Discussion

The herbal recipe preparation in study area varied significantly among the individuals depending upon nature of disease and drug as well as age and physique of the patient treated. 79.6% (287/360) respondents were involved in practicing ethnomedicinal recipes for feminine diseases. 54.4% were totally dependent on ethnomedicinal remedies whereas 25.2% were also practicing modern allopathic medicines along with ethnomedicine. 20.2% respondents were totally dependent on modern allopathic medicine (Table 1). Age factor along with education level appeared to be an important factor determining the choice of treatment [20]. In younger women, having a high literacy rate as compared to elder women, an increasing trend towards modern medicinal treatment was observed. In younger age group, 71% were dependent on ethnomedicine either entirely or along with modern treatment. Whereas in older age group, 88% were involved in ethnomedicinal practices whereas only 12% were dependent on modern medicine (Table 1). Due to conservative Islamic society as well as natural shyness, local women are always reluctant in sharing and exposing their feminine diseases with doctors, most of them are male [21].

table



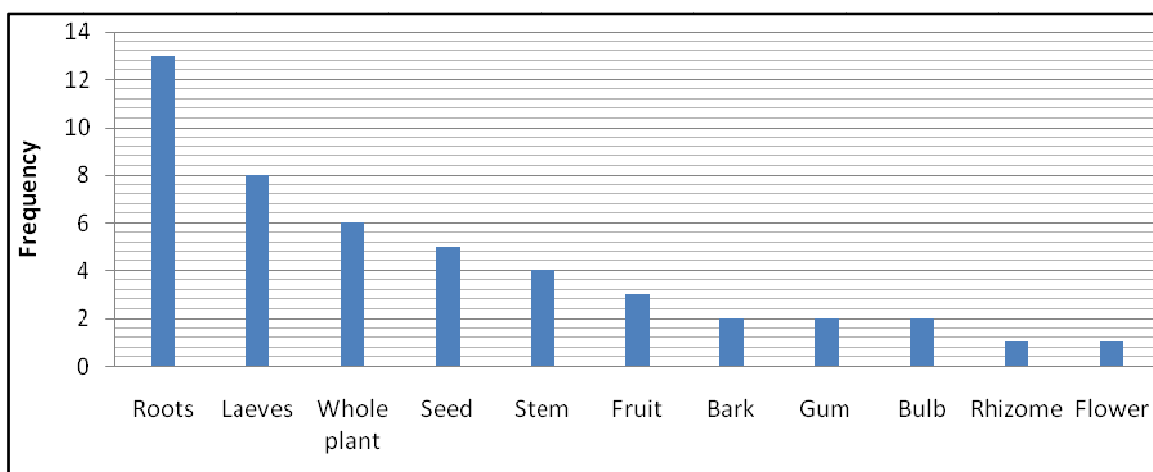


Fig 2: Proportion of plant parts used in ethnomedicinal recipes

Table 1: Age wise response of respondents about preferred treatment for feminine diseases

Age group (Years)	No of individuals	Educated	Uneducated	EM only	EM + MM	MM only
20-40	180	131	49	73	55	52
40-60	180	158	22	123	36	21
Total	360	289	71	196	91	73

EM: Ethno-Medicine MM: Modern medicine

This psychological factor inspires the women to choose ethnomedicinal recipes as their most preferred choice, promising them complete indoor treatment [22].

The results revealed that younger and more educated generation is relatively less interested in practicing ethnomedicine. More detailed studies in the same respect can generate concise knowledge to cure feminine diseases which is currently practiced in Himalayas. Systematically developed ethnomedicinal knowledge can also add

new cures to modern feminine pharmacopeia. Preserving and enhancing the indigenous plant knowledge is actually rescuing a global heritage [23] and is a recognized tool in search for new drugs and pharmaceuticals sources [24]. Hence it is the need of the hour that the precious ethnobotanical knowledge about feminine diseases should be collected, documented and transferred to the younger generation [25].

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