

Documentation of Traditionally useful medicinal plants used in the treatment of gynaecological disorders of Shahpur taluka, Karnataka, India

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ABSTRACT

Gynaecological disorder is one of the most severe conditions under reproductive health of women. The present paper deals with the medicinal plants used by the people of Shahapur taluk of Yadgir district, Karnataka for the treatment of gynecological disorders. A total of 20 species of plants were documented. The traditional practitioners of the study area are well experienced and familiar with plant based drug and their formulations. *Asparagus racemosus*, *Aloe vera*, *Clitoria ternatea*, are plants used for multiple disorders. The way of using herbal medicine in gynecological problems were similar to the treatment of other diseases. It is interesting to know the fact and mode of preparation and usage of dosage/ time enhance the efficacy of the drug. Traditional Knowledge holder strictly advice for food during particular period of drug consumption. Also found that women are satisfied with the drugs prescribed by traditional practitioners of the area as no specialists are available at neighboring villages. Further it is necessary that there is need of scientific validation of raw drugs and formulations for potential active principles.

Keywords: Medicinal Plants, Traditional Practice, Gynecological, Shahapur

INTRODUCTION

Gynaecology is the medical practice dealing with the health of the female reproductive system (uterus, vagina and ovaries). Menstrual trouble, menopause syndrome, morning sickness, leucorrhoea, anti-fertility, delivery problem, etc., are most related disorders (Mahbubur Rahman 2014)

According to WHO 'The health care of women is Crucial. Women who live in hamlets economically and educationally very poor. Generally pregnant women of rural areas prefer a skilled village midwife to gynaecologist for delivery. It is hardly possible for them to go to the healthcare and multi specialty centers owing to distance and inadequacy of money (Gupta & Solanki 2013).

Women's health problems have a high impact on social, economic, and psychological aspects of life. They are life line of all life stuffs although there is lack of awareness and health care systems globally.

Approximately 80% of world population depends on traditional herbal medicine for primary healthcare as plant and plant based medication in the base of many of the today's pharmaceutical drugs used for various ailments (Satyavati *et al.*, 1987).

Herbal medication hold esteemed position in the developing countries like India and China becoming popular among people of both urban and rural areas to their safety, efficacy and affordability. More than 8,000 plant species are registered for their ethnomedicinal importance (Joshi 1995) and traditional knowledge based formulations or indigenous traditional medicine has played an elementary role in the innovation of novel healthcare products from plants (Katewa 2009).

In recent decades, the use of folk medicines for women's health conditions have been extensively studied worldwide (Balick *et al.*, 2000; Steenkamp 2003; Srithi *et al.*, 2012; Van Andel *et al.*, 2014; Wet and Ngubane 2014; Boer and Cotington 2014; Johnson *et al.*, 2016; Yazbek *et al.*, 2016).

People all over world are dependent on traditional medicines for their ailments. Since centuries most people starts with home remedy or herbal remedy first for any health-related issues. may be due to various reasons such as ease of availability, less cost, absence of side effects and non-availability of modern affordable healthcare facility near them (Pomeroy 1991).

In the northern part of Karnataka researchers were documented ethnomedicine used for the treatment various ailments and negligible amount of research has been carried out regarding gynaecological disorder (Prashant & Vidyasagar 2006). The local plants are important curative agents in women's health problems and are used throughout the world (Ögenler &, Uzel 2012).

Therefore, keeping this in view, an attempt has been made to gather the information on medicinal plants used in the treatment of gynecological disorders through field survey and to document the same with scientific evidences.

MATERIALS AND METHODS

Study Area: (Map and location-Plate -1)

Survey and field visit:

The Present paper is outcome of frequent field trips for the documentation of ethno-gynaecological knowledge during January 2018 to December 2019. During the field visit met with senior personalities and traditional practitioners. Conducted successive interviews and took Photographs and documented the same on data sheet.

Information regarding plant species, biological forms, habitat, local names and uses was documented. Medicinal information was obtained through semi-structured interviews with knowledgeable people such as local Vaidyas, Hakeems and Elderly people. Plants are identified by using the flora such as “Flora of Gulbarga District” (Seetharam *et al.*, 2000) “Flora of presidency of Madras” (Gamble’s1915-1935) and prepared the herbaria. The voucher specimens are deposited at Herbarium Government College, Kalaburagi (GCHK).

PLATE-1:



Map of India, Karnataka and Shahapur of Yadgir District



RESULT & DISCUSSION

In the present survey, the medicinal uses of 20 plant species belonging to 20 genera and 13 families were recorded (Table -1 & Plate -2). Of those species, 7 belonged to Fabaceae, 2 Lytheraceae and 12 others. The most frequently used species for the treatment of gynecological diseases were, *Abrus precatorius*, *Achyranthes aspera*, *Aloe vera*, *Asparagus racemosus*, *Phyllanthus emblica*, *Ricinus communis*, *Terminalia arjuna*.

Among 20 Plant species 3 plants used for the treatment of Dysmenorrhea, 04 plants for Menorrhagia, 6 plants for Oligomenorrhoea and 9 plants for Leucorrhoea.

Many researchers documented the plants used in gynecological problems through out the globe. (Steenkamp 2003) reported herbal remedies for Women's health of South Africa. (Van 2014) documented Medicinal plants used for menstrual disorders in Latin America. (Srithi 2012) from northern Thailand. Similiar studies were also conducted in other parts of World (Wet H and Ngubane SC 2014 ; Yazbek 2016).

(Jain *et al.* 2004) listed 53 plants which are used to cure sexual diseases and for family planning. (Balamurugan *et al.* 2018) reported 66 medicinal plants of 44 families documentation based on quantitative ethnobotany.

Herbal drugs have been used frequently to treat women health problems, such as menstrual disorders, infertility, discomfort, dysfunctions of pregnancy, labour, urogenital diseases, and menopause (Beal 1998; Murphy *et al.*, 1999; Hall *et al.*, 2011).

Similar work has been conducted by (Rani Runam 2021) and reported that 136 common herbs used in reproductive and gynecological problem in India are *Abrus precatorius*, *Abutilon indicum* seeds juice used in amenorrhea, *Achyranthes aspera* roots and leaves used in amenorrhea and dysmenorrhoea, *Aristolochia indica* root juice used in menstrual disorder *Asparagus racemosus* tubers and stems juice are useful in uterine disorders. *Azadirachta indica* bark and fruits are used in menstrual problems, *Boerhavia diffusa* used for the remedy of leucorrhoea, *Phyllanthus emblica* fruits cure Gonorrhoea, *Hibiscus rosa-sinensis* bark and flowers used in amenorrhea, *Lawsonia inermis*, *Saraca asoca* bark and root used in leucorrhoea. (Shiva Prasad- *et al.*, 2020) documented Herbal drugs used by Traditional healers in Gynaecological and associated disorders (Kavya *et al.*, 2021) reviewed on medicinal plants utilized for Gynecological disorders.

Table -1 Plant used for the treatment of gynecological disorders in Shahapur taluk, Karnatak

Sl.No	Botanical Name	Family	Local name	Parts used	Ailment category	Preparation /dose
1	<i>Abrus precatorius</i> L.	Fabaceae	Gulaganji	Seeds	Dysmenorrhea and Menorrhagia	Mixed with Hot water, then taken orally during pain
2	<i>Acacia arabica</i> (Lam.) Willd.	Fabaceae	karijaal	Gum	Weakness due to menorrhagia	Decoction of 10 gms of gum with ghee and jaggery

3	<i>Achryanthes aspera</i> L.	Amaranthaceae	Uttarani	Leaves	Dysmenorrhoea	Dried leaves boiled with water, then filter the decoction and taken orally on early morning for 3 days.
4	<i>Aloe vera</i> (L.) Burm. f. S	Xanthorrhoeaceae	Lolesara	Leaves	Oligomenorrhoea and Dysmenorrhoea	Fresh Juice / pulp Mixed with Turmeric powder and Taken orally early morning in empty stomach.
	<i>Andrographis paniculate</i> Wall	Acanthaceae	Nela bero	Whole plant		Whole plant fresh juice taken orally empty stomach
5	<i>Aristolochia indica</i> L.	Aristolochiaceae	Eshwari	Root	Menorrhagia	Dried root boiled with water, then filter the decoction and taken orally
6	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Satavar	Root /Stem	Menorrhagia/ Burning sensation in Urine	Fresh and Dried root or stem is soaked in a glass of water for one hour. Taken orally early morning in empty stomach.
7	<i>Azadirachta indica</i> A. Juss	Meliaceae	Bavinamara	Bark	Leucorrhoea	Dried bark is boiled in water until extract decoction well, then the honey mixed with decoction and drink daily morning.
8	<i>Boerhaavia diffusa</i> L	Nyctaginaceae	Adkaputtana gida	Whole plant	Leucorrhoea	Dried leaves boiled with water, then filter the decoction and taken orally
9	<i>Butea monosperma</i> (Lam.) Taub	Fabaceae	Mutthuga	Flowers	Leucorrhoea	Half spoon of Powder of dried flower is mixed with Honey and taken
10	<i>Clitoria ternatea</i> L	Fabaceae	Shankhapushpi	Leaves/ Root	Leucorrhoea/ Oligomenorrhoea	4-5 healthy fresh leaves crushed and taken juice Orally.
11	<i>Cuminum cyminum</i> L.	Apiaceae	Jirige	Seeds	Oligomenorrhoea	Over night soaked seeds taken orally along with water
13	<i>Hibiscus rosasinensis</i> L.	Malvaceae		Flower	Oligomenorrhoea	Flower Extract taken orally
14	<i>Hordeum vulgare</i> L.	Poaceae	Jave godhi	Seeds	Burning sensation	Overnight soaked Seeds water taken orally empty stomach
15	<i>Lawsonia inermis</i> L.	Lythraceae	Goranti	Root	Leucorrhoea	Root decoction taken orally.

16	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Nellikae	Seeds	Vaginal infection	Seed powder taken with milk.
17	<i>Punica granatum</i> L.	Lythraceae	Dalimbe	Fruit rind	Leucorrhoea	Fruit rind dried and powder and taken orally.
18	<i>Saraca indica</i> L.	Fabaceae	Achanga /ashoka	Bark	Menorrhagia. Oligomenorrhoea/ Leucorrhoea	Bark powder taken orally.
19	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Combretaceae	Arjuna	Bark	Oligomenorrhoea and leucorrhoea.	Juice made from bark taken orally
20	<i>Trigonella foenum-graecum</i> L.	Fabaceae	Menthe	Seeds	Oligomenorrhoea	Over night soaked seeds taken along with soaked water

Terminology used

Leucorrhoea = Flow of a whitish or yellowish, discharge from the vagina

Menorrhagia = Abnormally heavy bleeding at menstruation

Oligomenorrhoea = Irregular and inconsistent menstrual blood flow

Dysmenorrhoea = Painful menstruation

Plate-2 Plant used for the treatment of gynecological disorders in Shahapur taluk, Karnatak



Abrus precatorius L.



Aristolochia indica L.



Asparagus racemosus Willd.



Clitoria ternatea L.



Butea monosperma (Lam.) Taub

Terminalia arjuna (Roxb. ex DC.) Wight & Arn.

CONCLUSIONS

Women in India are either hesitant or have lack of access to healthcare facilities in their area to undertake health checkups for natural gynaecological problems. The herbal based medicine can be a good alternative. The study, dealt with some medicinal plants which are commonly used in the Shahpur Taluka in the treatment of common gynaecological disorders.

The Scientific validation and pharmacological studies of these plants may provide some active principles and potent drug development for the treatment of such disorder.

Further, it is duty of the scientific community and policy makers to honour and acknowledge the Traditional Knowledge holders/Traditional Practitioners. To carry the knowledge for the successive generation, which is merely neglected.

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