

REPRODUCTIVE DISORDERS IN WOMEN AND TRADITIONAL HEALTH PRACTICES IN RATNAGIRI DISTRICT, MAHARASHTRA, INDIA#

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Abstract

The survey for traditional health practices in Ratnagiri district of Maharashtra state was carried out during2020-2021. The present paper makes an attempt to focus on the traditional medicines used by the Vaidus of Ratnagiri district for women's reproductive health problems and fertility control. The study reveals that twenty one plant species belonging to fifteen families are being used as traditional medicines to cure different reproductive health problems. The vaidus, who have a good knowledge about the herbal medicines usually, treat the female patients with reproductive health issues. Many elderly experienced women (Dayi) who attend the deliveries are also aware of the importance and use of such herbal medicine. Various plants and their parts are used for the preparation of medicines. Herbal remedies were mostly prepared in the form of decoction and were taken mainly orally. During this study, it was found that though the traditional reproductive health service is generally affordable and easy to access, the younger generation is reluctant for traditional treatment, instead, more influenced by the modern medicine.

Keywords: Traditional health practices, Reproductive health, Vaidus

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Introduction

ertility is one of the key determinants in the life time performance of women. Reproductive disorders adversely affect the reproductive efficiency. In view of the importance of traditional medicine which provides health services to 80% of the world population, increased demand of herbal materials by the Pharmaceutical companies is depleting natural plant resources. Hence, it is high time to document the medicinal utility of less known plants available in remote areas of the country (Zaidi and Crow2005). The management options available for the treatment of reproductive disorders include the use of drugs and a variety of surgical procedures. So in this context, the traditional knowledge of local healers and their experience in traditional systems of treatment is important, but their knowledge regarding the treatment practices have not documented and is vanishing very rapidly (Romha et. al. 2015). 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 (Gupta et al. 2013). Traditionally, the women in konkan region prefer plant medicines rather than modern medicines for menstrual trouble, conception disorders, birth control practices, sterility, abortion etc. In this traditional system of medicine, plant preparations in the forms of decoctions, concoctions, macerations or infusions are used to treat a wide range of diseases. Some of these plants are used in connection with human reproductive health problems, which are important public health and social problem world-wide (Diame 2010). Almost 8,000 plant species are registered for their ethnomedicinal importance (Joshi S.S.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 S.S 2009).

Study Area

Ratnagiri district is situated in the konkan region of Maharashtra state and appears as a narrow strip along the west coast of Maharashtra. This district is covered by Arabian sea from west, Kolhapur district on east, Sindhudurg district on the south and Raigad district on the north side respectively. The district comprises of nine talukas i.e. Mandangad, Dapoli, Khed, Chiplun, Guhagar, Sangmeshwar, Ratnagiri, Lanja and Rajapur. The district has dense forests. The west coastal estuaries show presence of typical mangrove vegetation. The area is economically and educationally backward, that's why most people are totally dependent on their traditionally health practices for health care.

Materials and Methods

The present work is the outcome of extensive survey of different villages of Ratnagiri district of Maharashtra undertaken during 2020-21 to collect information on the traditional uses of medicinal plants on reproductive disorders of women. The random survey was mainly based on interview and observations followed by discussions with practitioners and knowledgeable persons. Field visits were made along with these vaidus or traditional healers to collect the plant species used by them. The plants used

in traditional health practices for reproductive disorders of women were collected in their flowering season .The plant specimen were identified using knowledge of local people and standard key. During survey, it was well noted that many traditional health practices were producing desired results. Hence the attempts were made to document these practices systematically. Survey sheets were prepared carefully and supplemented with interviews with combination of questionnaire, informal discussion with vaidus, group discussions and personal interviews. All survey sheets were prepared to record all relevant information. Vernacular names and local names of the plants were mentioned.

Sr. No.	Botanical Name	Local Name	Family	Dosage
1.	Hibiscus rosa – sinensis L.	Lal Jaswandi	Malvaceae	Fresh petals of 4 to 5 flowers made into paste, one teaspoonful of cancy sugar powder added and mixed well. This is given as single dose twice a day for 7 to 10 days just before a week of menstrual period.
2.	Bauhinia racemosa Lam.	Apata	Fabaceae	Half cup of grinded stem bark filtrate given twice daily for seven days.

3.	Butea monospermea (Lam.) Taub.	Palas	Fabaceae	Overnight soaked handful petals in a cup of water ;filtered , mixed well with 10 gm. Of candy sugar and given in early morning and evening on empty stomach twice a day for 7 to 8 days.
4.	Wood fordia fruticosa (L.) Kurz.	Dhayati	Lythraceae	Handfull of dried flowers are soaked in a cup of water, 5 gm. Of candy sugar added and filtered through clean cloth. Half cup of filtrate is given once daily on empty stomach for 5 to 7 days.
5.	Ficus racemosa L.	Umber	Moraceae	Different plant parts are made into powder and mixed with milk to drink orally

The plant parts used and mode of administration were also noted. The description of disease or disorder is given along with modern medical terms with the help of a reputed gynecologist in Thane district.

Results

Plant species their parts used and the mode of administration to treat the reproductive disorders are tabulated below:

Table No.: 2. The list of Plants Used in Primary Amenorrhoea

Sr. No.	Botanical Name	Local Name	Family	Dosage	
1.	Bombax ceiba L.	Katesawar	Bombacaceae	Before sunset, in 20 gm. of fresh stem bark collected washed, grinded in a cup of water ,allowed to stand overnight .Then ,filtered through clean cloth. Half cup of filtrate given on empty stomach in early morning for 4 to 5 days.	
2.	Achyranthes aspera L.	Aghada	Amaranthaceae	3 ml fresh leaf decoction given orally for 7-15 days once or twice a day to cure amenorrhoea .	

Table No.: 3. The List of Plants Used In Leucorrhoea

Sr. No.	Botanical Name	Local Name	Family	Dosage	
1.	<i>Azadirachta</i> <i>indica</i> A.Juss.	Kadulimb	Meliaceae	Handfull of dried flowers are soaked in a cup of water , 5 gm. Of candy sugar added and filtered through clean cloth. Half cup of filtrate is given once daily on empty stomach for 5 to 7 days.	
2.	Aegel marmelos (L.)Corr.	Bel	Rutaceae	5 to 10 gm root bark pounded in a cupful water, allowed to soak overnight, squeezed and filtered through fine cloth to get half cup of decoction . This is given as single dose twice daily for 8 to 10 days on empty stomach.	
3.	Aloe vera (L.) Burm.f.	Korphad	Liliaceae	Skin of mature leaf removed to get pulp. 2 to 3 teaspoonful of pulp is mixed with half teaspoonful of sugar candy and Cumin powder. Whole mixture given as a single dose twice daily for 3 to 5 days.	
4.	Curcuma longa L.	Halad	Zingiberaceae	One entire inflorescence is crushed; mixed well with 50 gm of jaggary and made into pea nut size tablets. Two tablets given twice daily.	

Table No.: 4. The List of Plants Used In Abortion

Sr. No.	Botanical Name	Local Name	Family	Dosage
1.	Abrus precatorius L.	Gunj	Fabaceae	Two spoonful of root decoction of red varietyis administered orally dailyonce before breakfast.
2.	Ananas comosus L.	Ananus	Bromeliaceae	Three spoonful of leaf paste is administered early in the morning for 3 days.
3.	Annona reticulata L.	Ramphal	Annonaceae	Seeds with those of Piper nigrum are taken in equal quantities and powdered.3gm of powder is administered daily once for three days before breakfast for abortion of pregnancy upto 3 months.

4.	Calatropis procera (Ait.)R.Br.	Rui	Asclepiadaceae	Leaf is slightly fried in castor oil and placed on vagina for a whole night in early stages of pregnancy.
5.	Carrica papaya L.	Papaya	Caricaceae	Tender fruit paste with fresh latex is administered daily twice for 5 days. It causes abortion upto 5 months.
6.	Glorius superba L.	Agni Shikha	Liliaceae	Tuberous root and seeds of <i>Piper nigrum</i> are ground .2 spoonfuls of paste mixed with a pinch of ghee is administered early in the Morning to abort pregnancy upto 3 months.

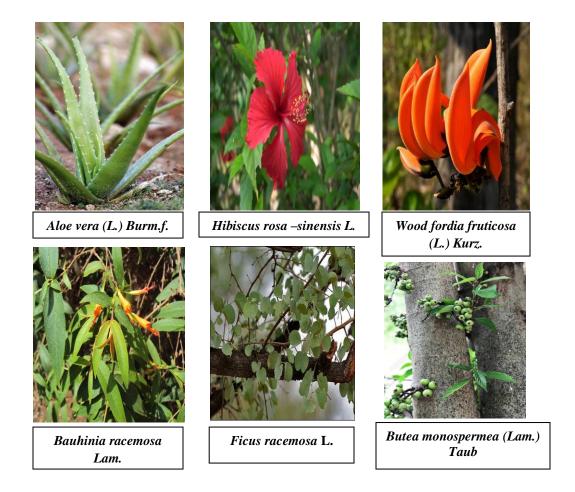
Table No.: 5. The List of Plants Used In Contraceptives

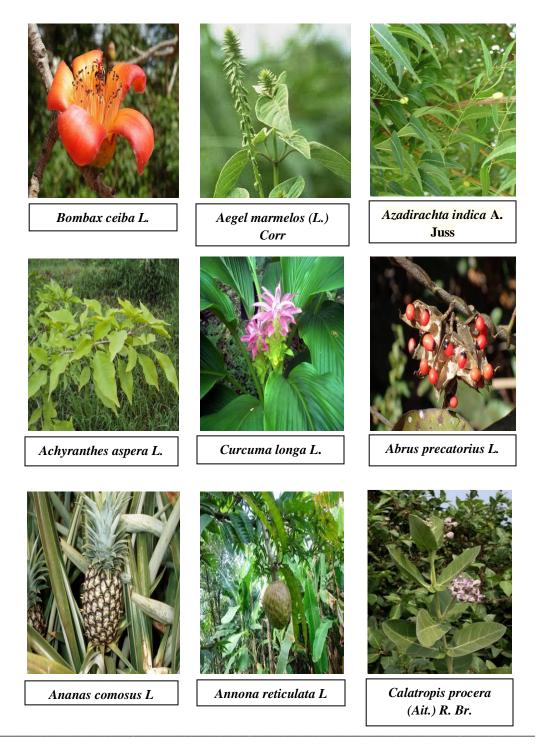
Sr. No.	Botanical Name	Local Name	Family	Dosage
1.	Abrus precatorius L.	Gunj	Fabaceae	A seed of white variety covered with jiggery is swallowed during menstrual period to prevent conception for one year.

Table No.: 6. The List of Plants Used In Labor Pain

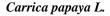
Sr. No.	Botanical Name	Local Name	Family	Dosage
1.	Sterculia urens Roxb.	Bhutya	Sterculiaceae	A spoonful of stem bark powder mixed in a glass of water is administered once only.
2.	Rauvolfia serpentina (L.)Benth ex Kurz.	Sarpgandha	Apocynaceae	Roots and leaves of Aloe vera are taken in equal quantities and ground.2 spoonful of paste is administered during labour pain.
3.	<i>Acacia</i> <i>pennata</i> Wild.	Babhul	Mimosaceae	Leaves decoction is drink orally.

Medicinal Plants











Glorius superba L.



Sterculia urens Roxb.



Rauvolfia serpentina (L.)Benth ex Kurz.



Acacia pennata Wild.

Discussion

The present study deals with twenty one plant species belonging to 18 families used in various women disorders and reproductive ailments like menorrhagia, leucorrhoea, abortion, labour pain and contraceptives. Local people freely make use of modern medicines to cure of ailments other than gynecological complaints. But for gynecological complaints, they are generally bashful and hesitate to go in for medicaments from hospitals or health centres. Instead of that they mostly prefer vaidus for their gynecological problems. Traditional practitioners or vaidus used herbs and trees most commonly as medicine due to the availability in nature (Uniyal et al.2006, Sanz-Biset

J et.al. 2009). This shows the persistent use of traditional medicinal plants by local people in one part of India (Mehta et.al.2013). As the results are highly satisfactory to the local people, they have great faith in it. However, a chemical and pharmacological screening of these recipes are essential to isolate active principle compound. (Canales et.al.2005)

Conclusion

The present study was focused on traditional health practices of women's reproductive disorders. Herbal medicines are like a blessing in konkan regions, where modern medical facilities are not available or insufficient. Diversity and efficacy of medicinal plants, along with the positive attitude of local people towards herbal medicines for the treatment of gynecological problems in the study area favored the aims of this study to document this treasure. Old women had a greater relation to indigenous plants, and they have potential information on the medicinal values of the indigenous plants. Younger generations have more relation with allopathic medicines that lead to the decrease of indigenous medicinal knowledge. Furthermore, this study will also be useful for the conservation of medicinal flora in the future.

References

- Canales M., Hernandez T., Caballero J. Informant consensus factor and antibacterial activity of the medicinal plants used by the people of San Rafael Coxcatlan, Puebla. *Mex J Ethnopharmacol.* 2005;97:429–439.
- Diame GLA. Ethnobotany and ecological studies of plants used for reproductive health: A case study at Bia Biosphere reserve in the western region of Ghana. Accra, Ghana: UNESCO; 2010.
- Gupta U., Solanki H. Herbal folk remedies used in treatment of Gynecological disorders by tribals of Simalwara Region, Dungarpur, Rajasthan. *Int J Pur Appl Sci Technol.* 2013;17(1):100–107.
- Joshi P. Printwell Jaipur; 1995. Ethnobotany of the Primitive Tribes in Rajasthan
- Katewa S.S. *Herbal Drugs: Ethnomed Mode Med.* Springer; Berlin: 2009. Indigenous people and forests: perspectives of an ethnobotanical study from Rajasthan (India)
- Mehta R., Tiwari A.K. Ethno phytoremedies used for the treatment of various Gynaecological problems by the baigas of north Baster, Chhattisgarh, India. *Int J Biol Pharm Alli Sci.* 2013;2(2):354–361.
- Romha, G., Dejene, T.A., Telila, L.B., and Bekele, D.F. (2015). Ethnoveterinary medicinal plants: Preparation and application methods by traditional healers in selected districts of southern Ethiopia, Veterinary World, 8(5):674-684.
- Sanz-Biset J., Campos-de-la-Cruz J., Epiquin-Rivera M.A. Ca nigueral S. A first survey on the medicinal plants of the Chazuta valley (Peruvian Amazon) *J Ethnopharmacol.* 2009;122:333–362.
- Uniyal S.K., Singh K.N., Jamwal P., Lal Traditional use of medicinal plants among the tribal communities chhota, Western Himalaya. *J Ethnobiol ethnomed*. 2006:2–14.
- Zaidi MA, Crow SA 2005. Biologically active traditionalmedicinal herbs from Balochistan, Pakistan. J Ethno-pharmacol, 96: 331-334.