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PHARMACY, BIOLOGY AND CHEMISTRY****Review Article****HERBAL AID IN WOMEN'S HEALTH****Sauris Panda¹, A.K. Samanta², P.R. Sur³.**

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Abstract

The present article concentrates on herbal remedies of some common ailments of women. As women shoulder greater responsibilities in home as well as society to build up the family and nation, adequate care must be taken to handle the problems of women to offer them a better health status. A number of plant species employed in the treatment of some common diseases of women and used in their health care are referred to here.

Key words: Disease, Health care, Herbal remedy, Plant species, Women's health.

INTRODUCTION

Women play an important role in the society. Their health issues are, however, relatively neglected compared to men; the concept of viewing the totality of women's health as different from men's health arose in western medicine only at the end of the 20th century, and the developing countries are still lagging behind most of Europe and U.S.A. in this respect.

Herbal remedies for some health problems of women include: urinary tract infection, pubertal changes, post-menopausal syndrome, hot flashes, menopause, poly-cystic ovarian syndrome, bacterial vaginosis, infertility, and for inducing labour, pregnancy, increasing breast milk production, abortion etc., and to improve their general health and wellness. Throughout history, women have conveyed information from mother to daughter on how herbs can cure some of the common ailments of life, particularly in relation to various gynaecological problems.

Plants are sometimes referred to as being phyto-estrogenic or phyto-progesteronic. This is because some plants have molecular structures similar to the hormones estrogen (phyto-estrogenic) and

progesterone (phyto-progesteronic). They can occupy the receptor sites in the body that would normally be taken up by these hormones. Some plants can both increase or decrease hormonal levels in the human system. Over thousands of years millions of women, particularly in rural areas, depended on herbs throughout their lives for their comfort, nourishment and healthcare.

Women from rural sector or from modern society rely on herbals for their health care and beauty care as well. Much research is going on around the globe about the therapeutic effectiveness, safety and best use of herbals in day to day practice to get rid of many diseases. Many of the dietary health practices include medicinally useful herbs consumed by the women, which reflect their health consciousness. The present article aims to provide an account of herbal aid in women's health and care.

Women's health care: global perspective

In order to understand the modern definition of women's health, it is important to understand women's health care as viewed by the medical and medical research establishments. The health of

women has often been seen as synonymous with maternal or reproductive health. Childbirth, sexually transmitted diseases, and cervical cancer have been the most important health issues for women in all ages and countries.

About 80% of the world's population are living in developing countries, and only 1.5% had access to modern medicines, the rest depended mainly on their traditional and indigenous systems of health care in which herbal remedies constitute a very prominent part. In China, much support has been given to traditional healers, there has been little doubt that they perform remarkably well in the field of herbal health care. The practice of traditional medicine is widespread in China, India, Japan, Bangladesh, Myanmar, Thailand and Sri Lanka. In China, about 40% of the total medicinal consumption is attributed to traditional tribal (herbal) medicines. Also in Japan, herbal medicinal preparations are now in increasing demand.

Indian women often have little autonomy, living under the control of – first their parents (father), then their husbands and finally their sons¹⁻³. Due to lack of self care and poor nourishment, women often suffer from mal-nutritional symptoms. Women's generous nature to tolerate sufferings and sometimes their reluctance to be examined by male physician / personnel are additional constraints in their getting adequate health care in Indian scenario, and many women in the developing countries still have high mortality rate particularly during pregnancy and childbirth.

Women's health can be seriously affected by many factors, such as stress, emotion, overwork, malnutrition, etc. The major problems in them are anaemia, menstrual irregularities, pregnancy related health, and of course, their mental health. As women shoulder greater responsibilities in home as well as society to build up the family and nation, adequate care must be taken to handle the problems of women to offer them a better health status.

Many herbal products are traditionally employed in healthcare practices, and those provided important clues to new areas of research. However, information on the various uses of plants is still lacking from many interior areas of India. Developmental activities and changing socio-economic patterns have a bearing on the traditional knowledge of herbal practices.

Gynaecological problems

Common gynaecological problems are abnormal uterine bleeding and endometrial thickening. Endometriosis in affected women usually detected between the ages of 14-35 years is a serious gynaecological problem. Uterine fibroids are muscle fibre swellings that are found in the womb, fibroids

are very common in women. They can occur in many shapes and sizes, single or multiple, located in various parts of the womb. The leaves of *Tinospora cordifolia* (Willd.) Hook.f. et Thoms. are used as general health tonic for women; the flowers of *Delonix regia* (Boj.) Raf. are used for dysmenorrhoea; the bark of *Butea monosperma* (Lam.) Taub. is used for menorrhagia and leucorrhoea. Other useful plants in these gynaecological problems are: *Andrographis paniculata* (Burm.f.) Wall. ex Nees, *Abrus precatorius* L., *Caesalpinia bonducella* (L.) Roxb., *Catharanthus roseus* (L.) G. Don, *Celosia argentea* L., *Crotalaria prostrata* Rottl. ex Willd., *Lawsonia inermis* L., *Mimosa pudica* L., *Striga densiflora* (Benth.) Benth., *Tridax procumbens* L., etc⁴. However, detailed analyses of these plant-based medicines in terms of phytochemistry, biological activity and clinical applications are necessary.

The menopause is the time in life when a woman stops having menstruation periods. The periods stop because the ovaries stop producing the normal amounts of oestrogen and progesterone hormones. Hot flushes and night sweats are very common at the time of menopause. *Cinnamomum verum* J. Presl., *Pueraria lobata* (Willd.) Ohwi, *Ruta graveolens* L., *Glycine max* (L.) Merr., *Dioscorea villosa* L., *Cimicifuga racemosa* (L.) Nut., *Vitex agnus* L., *Angelica sinensis* L., *Oenothera biennis* L., *Ginkgo biloba* L., *Trifolium pretense* L., *Agrimonia pilosa* Ledeb. and *Ailanthus altissima* (Mill.) Swing. are plants commonly employed in the treatment of gynaecological problems particularly related to irregular menstruation and other associated disorders, and menopause.

Ethnobotanical data collection to select pharmacologically active species carried out within a clearly defined therapeutic context: those plants used during the course of a woman's reproductive life; extensive bibliographical and field data collection, and cross-examination of the information thus gathered provided the effectiveness of a number of plant species⁵.

Osteoporosis

Normal calcium synthesis stops after the age of 35. Gradual shortage of calcium metabolism starts. Each pregnancy reduces calcium storage in the system; overall, repeated child birth and menopause cause gradual osteoporosis. Osteoporosis is one of the common long-term complications particularly among women. A lack of oestrogen causes the bones to thin slowly – the process is called osteoporosis, and over many years it increases the chances of bone fracture. Plants used against osteoporosis include: *Equisetum arvense* L., *Artocarpus heterophyllus* Lam., *Allium*

cepa L., *Glycine max* (L.) Merr., *Citrus* spp. (lime), *Punica granatum* L., *Terminalia arjuna* (Roxb.) Wight & Arn., *Withania somnifera* Dunal, *Zingiber officinale* Rosc., etc.

General tonic

Moderate malnutrition still affects many, particularly underprivileged children and women in rural areas. In addition to the known investments needed to reduce malnutrition, promoting gender equality, empowering women and ending violence against them could further reduce the prevalence of malnutrition in women population⁶. Plants which can be useful for general tonic include: *Medicago sativa* L., *Andrographis paniculata* (Burm.f.) Wall. ex Nees, *Cicorium intybus* L., *Morinda citrifolia* L., *Olea europea* L., *Panax quinquefolius* L., *Zingiber officinale* L., etc.

Fever, cold and headache

Plants useful against headache are: *Turnera diffusa* Willd. ex Schult., *Ilex paraguariensis* A. St. Hil, *Plumeria rubra* L., etc. A number of clinical reports have revealed an association between the use of alcohol / drugs and the onset of headache. Women were reported to have more migraine headaches than men. Medicinal plants are the inexpensive means of remedy, and because of its less serious side effects than caused by the synthetic ones they are more preferable for use. Plants useful in fever, cough and cold are: *Arnica montana* L., *Berberis vulgaris* L., *Bupleurum falcatum* L., *Eucalyptus globulus* Labill., *Hibiscus sabdariffa* L., *Hyssopus officinalis* L., *Datura strumarium* L., *Althea officinalis* L., *Urginia maritima* (L.) Baker, *Rumex crispus* L., *Eriodyction californicum* L., *Astragalus membranaceus* Schischkin, *Trigonella foenum-graecum* L., *Tanacetum parthenium* (L.) Sch.-Bip., *Glycyrrhiza glabra* L., *Verbascum densiflorum* Bertol., *Agastache rugosa* (Fisch. & C.A. Mey) Kuntze, *Baphicacanthus cusia* (Nees) Bremek., etc.

Against cancer

The most common form of cancer in women is breast cancer, which is the major cause of death from cancer for women aged between 30 and 60 years. Cervical cancer is also one of the most common cancers affecting women. About one out of every 60 women develops ovarian cancer in their lifetime. It has been noted that usually the more children a woman has, the lower her risk for ovarian cancer. Plants useful in cancer therapy are: *Momordica charantia* L., *Trichosanthes kirilowii* Maxim., *Codonopsis pilosula* Franch., *Vitis vinifera* L., *Camellia sinensis* (L.) Kuntze (tea plant), *Lavendula angustifolia* Mill.,

Podophyllum peltatum L., *Viscus album* L., *Rosmarinus officinalis* L., *Glycine max* (L.) Mar., *Withania somnifera* (L.) Dunnal, *Allium sativum* L., *Panax ginseng* L., *Conium maculatum* L., *Pinus pinaster* Ait., *Thuja occidentalis* L., *Ganoderma lucidum* (Curtis) P. Karst., etc.

Soy products, which are widely eaten in the Far East, are hypothesized to play a key role in this region's lower rate of cancer, heart disease and menopausal symptoms. Soy products contain isoflavones, an antioxidant that can reduce hot flashes and help inhibit tumour growth and cancer.

Cosmetic uses

The concept of beauty and cosmetics is as old as mankind and civilization. Inscribed in history in the Aryan period that witnessed the use of turmeric – haridra (*Curcuma longa* L.), saffron, alkanet, agaru, chlorophyll green from nettle plants and indigo for bodily decorations apart from using 'Raktachandan' (*Pterocarpus santalinus* L.f.), 'Chandan' (*Santalum album* L.) for beautification of both women and men. Using 'mehendi' (henna, obtained from *Lawsonia inermis* L.) for dyeing hair in different colours and conditioning was also practised in the olden times. Cosmetics include skin-care creams, lotions, powders, perfumes, lipsticks, finger-nail and toe-nail polish, eye and facial make-up, hair colours, hair sprays and gels, deodorants, bath oils and many other types of products in which herbal components share a major part. The use of cosmetic products is widespread, especially among women in western countries. A subset of cosmetics is called 'make-up' which refers primarily to coloured products intended to alter the user's appearance without affecting the body's structure or functions.

Hair or alopecia problem

A disease of the scalp resulting in complete or partial baldness is known as alopecia. Hair is lost when hair follicles stop functioning and it may be temporary or permanent. Temporary baldness, which may be general or patchy, can occur in severe debilitating illness or may result from drugs, poisons, radiation, hormonal disorders or emotional stress. Hair may regrow in such cases when the hair follicles are no longer influenced by whatever caused their temporary failure.

Some women lose certain amount of scalp hair after the menopause, because they have an excess of male hormones when the ovaries are not producing enough female hormones to counteract them⁷. Alopecia can also occur among young girls in hormonal hyperandrogenism and hyper-insulism cases.

The following plant species are used as hair tonic since ancient times: *Abrus precatorius* L. (seed),

Acacia sinuata (Lour.) Merr. (pod), *Achillea millefolium* L. (whole plant), *Annona squamosa* L. (seed), *Azadirachta indica* A. Juss. (seed, leaf), *Boswellia serrata* Roxb. ex Colebr. (gum resin), *Croton tiglium* L. (seed), *Cuscuta reflexa* Roxb. (whole plant), *Datura metel* L. (fruit), *Eclipta alba* (L.) Hassk. (leaf), *Ficus benghalensis* L. (root, bark), *Hibiscus rosa-sinensis* L. (flower), *Lawsonia inermis* L. (leaf), *Mangifera indica* L. (cotyledons), *Nardostachys grandiflora* DC. (rhizome), *Pithecellobium dulce* (Roxb.) Benth. (leaf), *Saussurea costus* (Falc.) Lapsch. (root), *Schleichera oleosa* (Lour.) Oken. (seed), *Terminalia bellirica* (Gaertn.) Roxb. (seed), *Tragia involucrata* L. (fruit), *Trichosanthes cucumerina* L. (leaf), *Trigonella foenum-graecum* L. (leaf), *Vitex negundo* L. (leaf), etc.

CONCLUSION

There is still a poor record in maternal health in India (cf. report in "The Statesman", Kolkata, dated 07 January 2014, p. 2). All-time inflationary trends and soaring food prices particularly affect women's health and nutrition. In reality many women living below the poverty line eat only once a day so that other family members get enough to eat. As a result they suffer from severe malnutrition. A malnourished mother obviously gives birth to a malnourished baby, leading to, partly a malnourished nation! What women need is supporting structures in the form of good planning and policies. Both women and men need health policies that target their specific or unique needs.

At the dawn of the 21st Century, there has been a rapid revival of Asian traditional health practices in Asia and beyond. Asian traditional health practices and herbal medicines have taken central stage, and become alternative modes of effective healing to the well-established cosmopolitan and clinical-based allopathic treatments.

A great lot of work is yet to be done to precisely understand the impact of multiple roles and responsibilities of women on the physical and mental health at different stages in their life cycle. Only concerted efforts and co-operation from every corner of the society will help to resolve the problems of women's physical and mental health, leading to overall human development – for both men and women.

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