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Impact of medicinal plants against malnutrition among women: An overview

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Abstract

Malnutrition is a serious health issue among women in developing countries like India. Women are prone to such, due to diverse reasons both urban and in rural areas. Around the globe, women at all ages suffering invariably with health issues like Anemia, Malnutrition, Rheumatoid arthritis, Osteoporosis, Obesity, Menstrual irregularities. India, having its rich heritage of medicinal plants, playing a significant role in solving the issues faced by women elsewhere in the country by their simple and cheap herbal home remedies. From the historical point, usage of herbals by women for treating health issues seems to be interesting and encouraging. Least side effects, safety, cost affordability of traditional herbs being practiced for long time to control such problems. Recent days, life threatening diseases like cancer also alarming and the usage of herbals for the women highly recommended by Ayurveda and siddha system too. Culinary herbs, widely used by women for correction of many health issues in day to day life and there is an urgent need and awareness to be created among women in all ages to apply and for the usage of such herbals for their effective healthy life which is very much essential. This review highlight the major factors which cause severe health issues of malnutrition and related impacts of it among women and routine practices to be adopted by usage of medicinal plants to combat malnutrition such.

Keywords: Women, Medicinal plants, Health issues; Malnutrition

Introduction

Women plays a key role in family, society, higher positions and elsewhere in the society in the present scenario. They compete in every sections to prove themselves equally with that of men. Malnutrition mainly due to early marriage, repeated childbirth, pregnancy, poor diet and socioeconomic factors. And related health issues are Anemia, Rheumatoid arthritis, Obesity, Menstrual irregularities. Anaemia, the major health issue among women at all ages around the world. Around the world, women at all ages suffering with variety of health issues. Stress and Poor health care, malnutrition and many aspects still worsen the case. The average nutritional intake of women is 1400 calories daily. The necessary requirement is approximately 2200 calories 92% of women in India suffer from gynaecological problems [1] 300 women die every day due to childbirth and pregnancy related causes [2]. Moderate malnutrition continues to affect 46% of children under five years of age and 47% of rural women in India. Women's lack of empowerment is believed to be an important factor in the persistent prevalence of malnutrition. In India, women's empowerment often varies by community, with tribes sometimes being the most progressive. Improving women's nutrition, promoting gender equality, empowering women and ending violence against women could further reduce the prevalence of malnutrition of the Indian population [3].

Medicinal plants nowadays playing its role taking care of such issues. In order to understand the modern definition of women's health, it is important to understand women's health care viewed by the medical and medical research establishments. Traditionally, the health of women has been seen as synonymous with maternal or reproductive health. Childbirth and sexually transmitted diseases, cervical cancer have been the most important health issues for women in all ages and places. The women are getting more stress and lack of self care and poor. In addition the smoke from household biomass having serious impact includes eye problems, respiratory problems, chronic bronchitis and lung cancer among the women as the exposure time is more in our social setup. It may leads to anemia those susceptible to carbon monoxide toxicity. Mortality, smoking, chewing tobacco and alcohol use were four separate binary outcomes in the analysis in Indian scenario.

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The practice of traditional medicine is widespread in China, India, Japan, Pakistan, Sri Lanka and Thailand. In China about 40% of the total medicinal consumption is attributed to traditional tribal medicines. In Japan, herbal medicinal preparations are more in demand than mainstream pharmaceutical products. The modern field of women's health includes the study of illnesses and conditions that are unique to women, more common or serious in women, have distinct causes or manifestations in women, or have different outcomes or treatments in women. Since the 1980s, research on gender differences in health and disease has had important implications for the treatment and prevention of a variety of common serious illnesses, including heart disease, stroke, lung cancer, depression, colon cancer, and dementia. A greater understanding of the factors influencing women's health from a biological perspective has been paralleled by a greater understanding of the psychosocial and societal factors that affect women's health status. Differences in employment patterns also result in fewer women being medically insured than men, strongly affecting access to health care and health status. The importance of herbals in traditional healthcare practices, providing clues to new areas of research and in biodiversity conservation is now well recognized. However, information on the uses for plants for medicine is lacking from many interior areas. Implication of developmental activities and changing socio-economic conditions on the traditional knowledge [14].

Women from rural sector or from modern society rely on herbals for their health and beauty care as well. Herbal remedies for women include medicinal herbs and Ayurveda herbal remedies for problems like Urinary tract infection, Post menopausal syndrome, Hot flashes, Menopause, Poly cystic ovarian syndrome, yeast infections, fertility, breast milk production and to improve their health and wellness. Women have handed down information from mother to daughter on how herbs can remedy some of the common maladies of life. Medicinal plants, because of its high values and least side effects, used by women around the globe seems to be useful and found quite encouraging as it revert back to the olden history where herbs and its usage found interesting episodes.

The cost and availability of herbals & its utilization resources transferred from one generation and other keeps the information alive and useful to all. Since women playing a multirole & facing variety of the problems special health care and attention needed to improve their health status and their performance in all activities concerned. Medical care becoming costly and much painful and the affordability will be question for the poor. So there is a great demand among the women with the usage of medicinal plants with its health coverage and minimum ill effects.

Smoking, drinking alcohol, and chewing tobacco also show graded associations with socioeconomic status within indigenous groups. Socioeconomic status differentials substantially account for the health inequalities between indigenous and non-indigenous groups in India. However, a strong socioeconomic gradient in health is also evident within indigenous populations, reiterating the overall importance of socioeconomic status for reducing population-level health disparities, regardless of indignity [15].

Medicinal herbals for malnutrition and related health issues.

Major women population suffers with Anemia and related issues and the reasons may be multifactorial. Anemia rates among Indian women are the highest in the world [16]. Its prevalence is highest among women in the Eastern states of

India [7, 8, 9]. There are also substantial, surprising and inexplicable regional differences. While there are several types of anemia, specifically to Iron-Deficiency Anemia (IDA), the most common form of anemia in India [10, 11]. The other factors which can cause anaemia, pregnancy, repeated child birth and breast feeding, early marriage and poverty. The medicinal plant *Moringa oleifera* is famous for the management of anaemia. *Jatropha tanjorensis*, *Albezziya lebback*, *Allium cepa*, *Allium sativum*, *Aloe vera*, *Carica papaya*, *Colocasia esculenta*, *Gossypium hirsutum*, *Garcinia cola*, *Ipomoea batatas*, *Jatropha curcas*, *Jatropha tanjorensis*, *Mangifera indica*, *Mucuna pruriens*, *Musa paradisiaca*, *Ocimum gratissimum*, *Psidium guajava*, *Terminalia catappa*, *Gossypium hirsutum*, *Carica papaya* found useful in treating anaemia.

Osteoporosis is a progressive disease characterized by the decrease in bone mass which has major problem for the persons. osteoporosis, a silent epidemic has become a major health hazard in recent years, a major growing health problem for elderly women associated with ovarian hormone deficiency following menopause and is by and far the most common cause of age related bone loss in women. According to the WHO "Osteoporosis is a disease characterized by low bone mass and microarchitectural deterioration of bone tissues, leading to enhanced fragility and consequent increase in fracture risk that results in fractures with minimal trauma". [22] Aging, lack of physical activity, malnutrition that included deficiencies of vitamin D and calcium, prolong hormonal imbalance, tobacco smoking and excessive consumption of alcohol were among the major risk factors. Undernutrition, particularly protein under nutrition, contributes to the occurrence of osteoporotic fracture, by lowering bone mass and altering muscle strength. Cushing's syndrome, hyperparathyroidism, thyrotoxicosis, insulin-dependent diabetes mellitus, acromegaly, adrenal insufficiency, malnutrition, parental nutrition, malabsorption syndromes, gastrectomy, severe liver disease, pernicious anaemia, lymphoma and leukaemia, mastocytosis, haemophilia also worsen the case. Medicinal plants like *Moringa oleifera*, *Withania somnifera*, *Punica granatum*, *Litsea glutinosa*, *Panax ginseng*, *Psoralea corylifolia*, *Curcuma aromatic*, *Zingiber officinale*, *Astragalus membranaceus*, *Dioscorea batatas* *Nigella sativa*, *Podophyllum emodi* seems to be effective in the management of osteoporosis as per scientific literature. Usage and its implications in therapy yet to be studied.

Malnutrition, iron, folate and zinc deficiencies leads to gynaecological problems. Medicinal plants, namely *Tinospora cordifolia*, *Delonix regia*, *Butea monosperma*, *Andrographis paniculata* Nees, *Abrus precatorius* L. *Butea monosperma* Roxb., *Caesalpinia bonducella* L., *Catharanthus roseus* L., *Celosia argentea* L. *Crotalaria prostrata* Rottl., *Lawsonia inermis* L. *Maytenus senegalensis* Lam. *Mimosudica* L. *Striga densiflora* Benth. *Tinospora cordifolia* Willd. *Tridax procumbens* [12]. The menopause [13] is the time in life when a women stops having 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 the menopause. *Cinnamomum verum*, *Pueraria lobata*, *Ruta graveolens*, *Glycine max*, *Dioscorea villosa*, *Cimicifuga racemosa*, *Vitex agnus*, *Angelica sinensis*, *Oenothera biennis*, *Ginkgo biloba*, *Trifolium pretense*, *Agrimoniapilosahedeb*, *Ailanthus altissima* (Mill) swingle are commonly employed in the treatment of health care appointments for complementary and alternative therapies [14]. Symptoms associated with menopause can greatly affect the

quality of life for women. Botanical dietary supplements have been viewed by the public as safe and effective despite a lack of evidence. Taken together, these data indicate a need to reprioritize the order in which the bioassays are performed for maximal efficiency of programs involving bioassay-guided fractionation. In addition, possible explanations for the conflicts in the literature over the estrogenicity of *Cimicifuga racemosa* [15].

Despite widespread use there has been surprisingly little research into the outcomes or the potential risks of using herbal therapies during pregnancy. Similarly phytoestrogens have become one of the fashionable areas of herbal treatment, although with remarkably little evidence of benefit. Studies have been carried out to assess their effectiveness in cardiovascular disease and osteoporosis but not their effect on irregularities of menstruation. Current herbal treatment in this area comes from traditional use, laboratory work and a lack of adequate clinical trials make it impossible to suggest which remedies may be of benefit [16].

Estrogen replacement therapy is one of the most commonly prescribed medicines in the United States by traditional medical professionals. Over the past decade, the market for complementary/ alternative therapies for hormone replacement has dramatically increased. Women are seeking more "natural" alternatives to treat menopausal symptoms. Several popular herbal therapies for menopausal symptoms including phytoestrogens, *Cimicifuga racemosa*, *Angelica sinensis*, *Vitex agnus-castus* [17]. The issue of integration of herbal medicine into mainstream management of menopausal symptoms is also debated as a means of providing optimum and safe care to women at this time [18]. *Medicago sativa*, *Andrographis paniculata*, *Chicorium intybus*, *Morinda citrifolia*, *Olea europea*, *Panax quinquefolius*, *Zingiber officinale*.

Cancer & health issues: About one out of every 4-60 women will develop ovarian cancer in their lifetime. It has been noted that the more children a woman has, the lower her risk for ovarian cancer. Breast cancer is the most common form of cancer in women. It is the major cause of death from cancer for women aged between 30 and 60 years. Cervical cancer is one of the most common cancers affecting women. It occurs in the cervix which is the lower part of the womb protruding into the vagina. Cervical cancer is divided into two stages; early or pre-invasive stage, and the late or invasive stage. Cancers of various types handled by the usage of medicinal plants like *Momordica charantia*, *Tricosanthes kirilowii*, *Codonopsis pilosula*, *Vitisvinifera*, *Camelia sinensis*, *Lavendula angustifolia*, *Podophyllum peltatum*, *Viscus album*, *Pinus pinaster*, *Rosmarinus officinalis*, *Ganoderma lucidum*, *Scutellaria species*, *Glycinemax*, *Thuja occidentalis*, *Withania somnifera*, *Allium sativum*, *Panax ginseng*, *Curcuma zedoaria*, *Typhonium flagelliforme*, *Phaleriamacrocarpa*, *Catharanthus srozens*, *Selaginella corymbosa*, *Brucca javanica*, *Allium sativum*, *Smilax china*, *Helianthus annus*, *Solanum nigrum*. Along with the medicinal plants [23] Soy products, which are eaten widely in the Far East, are hypothesized to play a role in this region's lower rates of cancers and heart disease and menopausal symptoms. Soy products such as beans, tempeh, tofu, soy milk, and miso contain isoflavones, an antioxidant which can reduce hot flashes and help inhibit tumor growth and cancer.

Stress related health issues

A woman's hormone levels fluctuate during puberty, pregnancy, menopause and her monthly menstrual cycle. Stress and tensions are the inevitable items for the working

candidates during these days with the competitive world. As women taking challenging roles, stress related health issues are also progressing. As women play a multifaceted role, the responsibility shoulder the stress cause. Occupational and emotional stress added if they are working too.

Stress based health issues are Depression, Insomnia, increased risk of heart disease and stroke, infertility. The major reason it is necessary to develop specific tools for research into women's occupational health problems is that the labour force is still very much divided by sex [19] so women and men do very different work and are exposed to different risks. In order for men and women to be evenly distributed across the job market, about three quarters of women would have to change jobs [20]. Women's jobs have specific which may lead over time to changes in physical and mental health; Spaces, equipment and schedules designed in relation to the average male body and lifestyle may cause problems for women; Occupational segregation may result in health risks for women and men by causing task fragmentation, thereby increasing repetition and monotony; Discrimination against women is stressful in and of itself and may affect mental health;

Recent years have seen an increase in the number of women in the labour force and public health practitioners, workers and scientists are starting to include women's concerns in their occupational health activities

Discussion

Nutrients rich foods are vital for proper growth both in adults and children. Malnutrition will refer to conditions of nutritional deficiency, including under nutrition and micronutrient deficiencies, though malnutrition actually also relates to problems of nutritional excess. In recent years, there has been a gradual revival of interest in the use of medicinal plants in developing countries because herbal medicines have been reported safe and thousands of rural communities and families still rely on folklore medicine to cure diseases in developing countries. The vitamins and nutrients rich medicinal plants effectively used for health issues invariably because of such benefits.

Medicinal plants have been source of wide variety of biologically active compounds for many centuries and used extensively as crude material or as pure compounds for treating various disease conditions [24]. Medicinal plants are the inexpensive drugs for all categories of women around the world, and because of its least side effects, being practiced by women. The effects on health of women's multiple roles are still poorly understood. Medicinal plants are sometimes referred to as being phytoestrogenic or phytoprogesteric. Recent years have seen an increase in the number of women in the labour force and public health practitioners, workers and scientists are starting to include women's concerns in their occupational health activities the occupational health of women in sex work varies with the meanings, customs and contexts of sex work in their local area [21].

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