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REVIEW

PHYTOTHERAPY AS AN INTERVENTION IN WOMEN'S HEALTH: AN INTEGRATIVE LITERATURE REVIEW

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ABSTRACT

Objective: to review the scientific publications available in the literature that describe phytotherapy as intervention in women's health.

Method: an integrative literature review conducted in the MEDLINE, CINAHL, Scopus, and PUBMED databases. The following guiding question was adopted: "What evidence available in the literature describes the use of phytotherapy as intervention in women's health?" The descriptors used were the following: "Phytotherapy"; "Complementary Therapies"; "Women's Health". The process of surveying and gathering data took place in November and December 2018, in the city of Redenção, state of Ceará, Brazil.

Results: nine articles were analyzed, three of which discussed medicinal plants used to treat menopause, three infertility, one gynecological infections, and two hormonal disorders.

Conclusion: scientific studies on medicinal plants are still scarce, and the need for further studies and research on phytotherapy used in the treatment of gynecological diseases is essential.

DESCRIPTORS: Phytotherapy; Women's Health; Complementary Therapies; Diseases of the Female Genitals; Medicinal Plants.

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FITOTERAPIA COMO INTERVENÇÃO EM SAÚDE DA MULHER: REVISÃO INTEGRATIVA DA LITERATURA

RESUMO
Objetivo: revisar as publicações científicas disponíveis na literatura que descrevem a fitoterapia como intervenção em saúde da mulher.
Método: revisão integrativa da literatura nas bases MEDLINE, CINAHL, Scopus e PUBMED. Adotou-se a questão nordeadora: "Quais evidências disponíveis na literatura descrevem a utilização da fitoterapia como intervenção em saúde da mulher?". Os descritores utilizados foram: "Phytotherapy"; "Complementary Therapies"; "Women's Health". O processo de busca e levantamento dos dados ocorreu em novembro e dezembro de 2018, no município de Redenção-Ceará.
Resultados: foram analisados nove artigos, três relataram sobre plantas medicinais utilizadas no tratamento da menopausa, três sobre infertilidade, um sobre infecções ginecológicas e dois sobre distúrbios hormonais.
Conclusão: os estudos científicos acerca das plantas medicinais ainda são poucos, sendo fundamental a necessidade de mais estudos e pesquisas acerca da fitoterapia utilizada no tratamento das doenças ginecológicas.

DESCRITORES: Fitoterapia; Saúde da Mulher; Terapias complementares; Doenças dos Genitais Femininos; Plantas medicinais.

FITOTERAPIA COMO INTERVENCIÓN EN LA SALUD DE LA MUJER: UNA REVISIÓN INTEGRADORA DE LA LITERATURA

RESUMEN:
Objetivo: revisar las publicaciones científicas disponibles en la literatura que describen a la fitoterapia como intervención en la salud de la mujer.
Método: revisión integradora de la literatura realizada en las bases de datos MEDLINE, CINAHL, Scopus y PUBMED. Se adoptó la siguiente pregunta guía: "¿Qué evidencias se ofrecen en la literatura que describan el uso de la fitoterapia como intervención en la salud de la mujer?". Se utilizaron los siguientes descriptores: "Phytotherapy"; "Complementary Therapies"; "Women's Health". El proceso de búsqueda y levantamiento de datos tuvo lugar en noviembre y diciembre de 2018, en el municipio de Redenção-Ceará.
Resultados: se analizaron nueve artículos; tres de ellos analizaron las plantas medicinales utilizadas en el tratamiento de la menopausia, tres la infertilidad, uno las infecciones ginecológicas, y dos los trastornos hormonales.
Conclusión: la cantidad de estudios científicos acerca de las plantas medicinales todavía es escasa, por lo que resulta fundamental realizar más estudios e investigaciones acerca de la fitoterapia utilizada en el tratamiento de las enfermedades ginecológicas.

DESCRIPTORES: Fitoterapia; Salud de la Mujer; Terapias complementarias; Enfermedades de los genitales femeninos; Plantas medicinales.

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INTRODUCTION

The use of plants for health purposes is dated since the dawn of humanity[1]. In many situations, the use of natural compositions helped in the health-disease process as a form of relief for signs and symptoms, as well as for the cure of illnesses, using techniques that are passed on empirically to other generations. However, with the industrialization process and the advances in the pharmaceutical industry, the use of this treatment model has been neglected by the population[2].

In Brazil, the biodiversity and ethnic and cultural diversity allowed for a significant increase in knowledge regarding the use of herbal medicines and medicinal plants in the therapeutic process. In this perspective, with the purpose of establishing government control over the use of these products, in 2007, the National Policy on Medicinal Plants and Phytotherapics was created, ensuring, in addition to the conduction of research studies, the expansion of knowledge to the population[3].

The World Health Organization (WHO) states that 80% to 85% of the population, mainly from developing countries like Brazil, believes in the curative potential of medicinal plants and uses them in the treatment of various pathologies[4]. However, the lack of information on the part of the professionals and the ineffective reporting by the users end up masking adverse reactions caused by the use of these substances: 1,728 cases of poisoning by the use of herbal medicines were recorded in Brazil in 2002, requiring further research in the area[5].

Important factors must be taken into account with regard to the increased use of medicinal plants in daily life. With the high price of the chemical drugs available for sale and the difficulty encountered by the population in accessing the health services, the nursing professional has inserted, based on scientific evidence, products from medicinal plants[6].

Women of reproductive age are comprised in the age group of 10 to 49 years old[7], representing 65% of the Brazilian women[8]. These figures are taken into account when developing strategies to promote sexual and reproductive health, increasingly including the use of herbal medicines and medicinal plants in the treatment of gynecological problems, or even during pregnancy, the menstrual cycle, and menopause. In this sense, as health professionals, such as nurses, know phytotherapy, they can consistently apply it in the health services.

The use of medicinal and phytotherapy plants is a possible means of expanding the work field of the health professionals who are still deficiently informed and prepared to deal with these resources[2]. It is highlighted that the prescription of the phytotherapeutic medicine to be consumed by the patient is the responsibility of accredited health professionals to define the medication to be used[3].

There is a variety of plants used for several purposes, with 97 species associated with maternity issues, 94 species to the menstrual cycle, and 243 species to treat other conditions[9], which reveals plurality of compositions and use in the therapeutic process of gynecological disorders. Given the above, this study aims to review the scientific publications available in the literature that describe herbal medicines as interventions in women's health.

METHOD

The methodological path adopted in this integrative review followed these stages: identification of the theme and selection of the hypothesis, election of criteria for inclusion

and exclusion of studies, literature search, categorization of the studies, evaluation of the studies included in the integrative review, interpretation of the results, and research synthesis[10]. The entire research was guided by the following question: "What evidence available in the literature describes the use of phytotherapy as intervention in women's health?"

The process of surveying and gathering data took place in November and December 2018, in the city of Redenção, state of Ceará, Brazil. The databases chosen were the following: MEDLINE, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Scopus, and PUBMED.

The descriptors used were searched for in the Medical Subject Headings (MeSH) and in the Health Sciences Descriptors (*Descritores em Ciências da Saúde*, DeCS), namely: "Phytotherapy"; "Complementary Therapies"; "Women's Health", using the Boolean operators AND for cross-referencing "Phytotherapy AND Complementary Therapies AND Women's Health". In order to expand the sample, a second strategy of combining descriptors was adopted in the Medical Literature Analysis and Retrieval System Online (MEDLINE), Scopus, and PUBMED databases: "Phytotherapy AND Women's Health".

The criteria used to include the articles were the following: primary articles published in the last five years (2014-2018), in Portuguese, English and Spanish, that addressed the guiding question. In addition, the articles should be available online on the platforms and with free access, in full. Theses, dissertations, literature and editorial reviews, experience reports, previous notes, and meta-analyses were excluded from the research. Figure 1 presents the synthesis of the studies for the review.

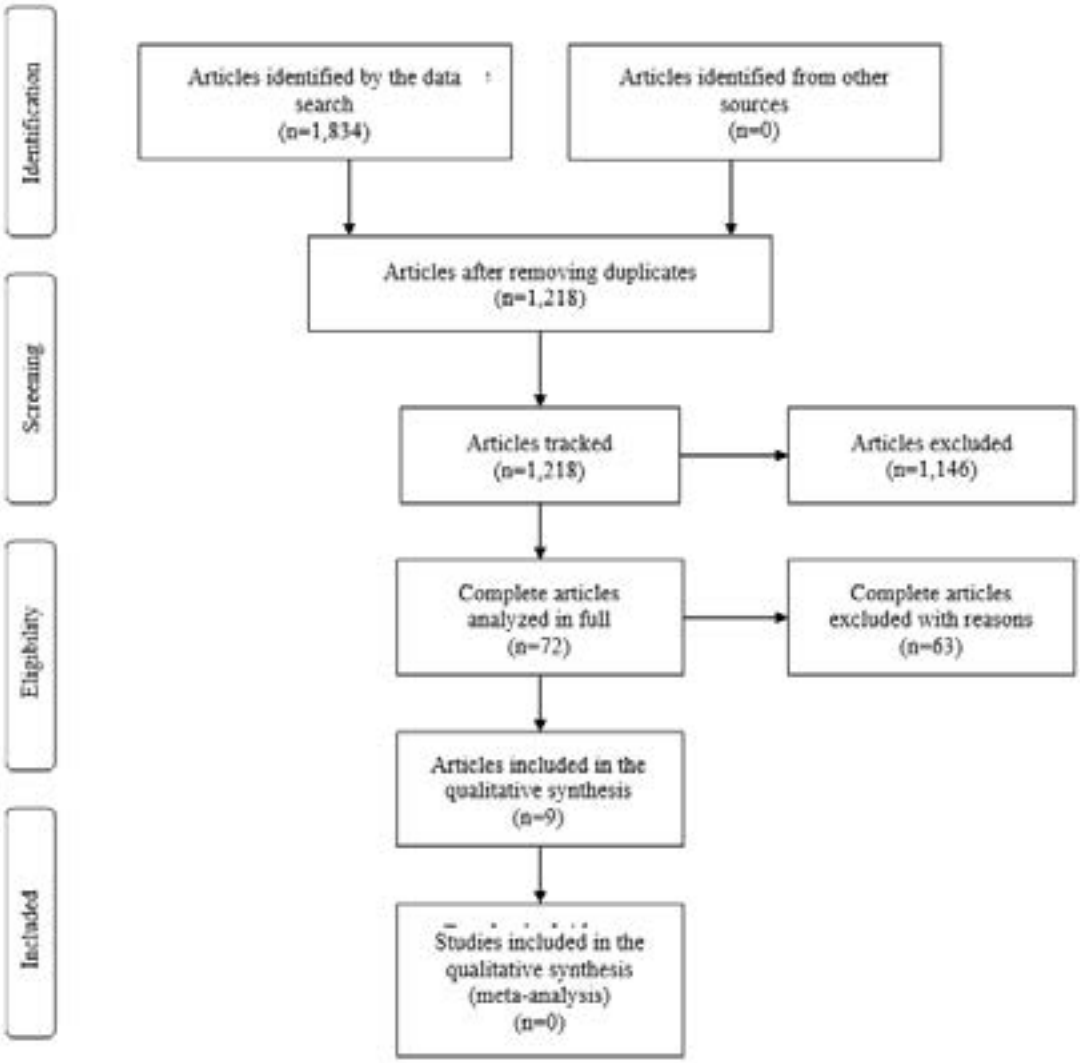

Figure 1 – Flow diagram referring to the selection of the articles included in the review. Redenção, Ceará, Brazil, 2019

A total of 1,834 articles were identified in the searches in the selected databases, with the exclusion of 616 duplicate publications; and, after reading the titles, abstracts and descriptors, 72 articles were analyzed in full. Of these, 63 were excluded because they did not answer the guiding question of the research.

After reading and selecting the articles, instruments created by the authors were used to extract, in a descriptive way, information from the articles about the following topics: database, journal, title, author, year, objectives, method, and main results. The levels of evidence of the articles found were also detailed, divided into five levels by types of study, highlighting level one because they are randomized studies with high power and statistical treatment[11].

The results were organized in synoptic charts and in categories to discuss the importance of medicinal plants in women's health care.

RESULTS

Nine articles were analyzed, three of which discussed medicinal plants used to treat menopause, three infertility, one gynecological infections, and two hormonal disorders

Chart 1 presents the general data of the articles found. Chart 2 summarizes the objectives, level of evidence, method of each study, and main results present in the literature consulted. Chart 3 presents information about the medicinal plants most mentioned in the literature during the integrative review.

Chart 1 – Presentation of the synthesis of the articles included in the total sample of the integrative review. Redenção, Ceará, Brazil, 2019 (continues)

	Database	Journal	Title	Author/ Year
1	CINAHL	Phytotherapy Research	Combined lifestyle and phytotherapy in obese women with polycystic ovary syndrome (PCOS): a randomized controlled study	Arentz, et al. (2017)
2	SCOPUS	Medicine Baltimore	Chinese herbal products for female infertility in Taiwan: a population-based cohort study	Hung, et al. (2016)
3	SCOPUS	Journal of Ethnopharmacology	Medicinal plants used in Lesotho to treat reproductive and post-reproductive problems	Moteetee and Kose (2016)
4	SCOPUS	Journal of Ethnopharmacology	Ethno-medico-botanical study of the indigenous knowledge about medicinal plants used in the treatment of reproductive problems in the district of Nalbari, Assam, India	Adhikari, et al. (2017)
5	SCOPUS	Journal of Complementary and Integrative Medicine	Effectiveness of Tamarindus indicus, Melia azadirach, and Santalum album in the syndromic management of abnormal vaginal discharge: a randomized, single-blind, controlled study	Bhat and Begum (2017)

6	SCOPUS	Maturitas	Effects of sea buckthorn oil intake on vaginal atrophy in post-menopausal women: a randomized, double-blind, placebo-controlled study	Larmo, et al. (2014)
7	SCOPUS	BioMed Research International	Ethnogynecological assessment of medicinal plants in the Pashtun tribal society	Adnan, et al. (2015)
8	SCOPUS	Holist Nurs Pract	The effects of flax seeds on menopausal symptoms and quality of life	Cetisli, et al. (2015)
9	SCOPUS	Climateric	Cimicifuga racemosa extract for relieving menopausal symptoms: a randomized clinical trial	Tanmahasamut, et al (2015)

Chart 2 – Presentation of the objectives, evidence level, method, and conclusion of the articles included in the final sample of the integrative review. Redenção, Ceará, Brazil, 2019 (continues)

Objective		**LoE**	**Method**	**Conclusion**
1	To determine the clinical efficacy of combining a phytotherapeutic treatment with a lifestyle intervention to promote a reduction in oligomenorrhea in overweight women with PCOS.	I	A randomized controlled trial conducted in Australian communities with women aged 18 to 44 years old with PCOS and overweight.	There is better effectiveness in the combined use of herbal medicines in women with PCOS.
2	To identify the Chinese herbal products (CHPs) most used for female infertility in Taiwan.	IV	Sampling in the National Health Insurance Research Database. Descriptive statistics and multiple logistic regression analysis were used to estimate the adjusted Odds Ratio (aOR) for the use of TCM and potential risk factors.	Combinations of CHP formulas or combinations of unique Chinese herbs were used to treat female infertility; further studies are needed.
3	To document the plants used by male and female Basotho individuals (Lesotho residents) for the treatment of reproductive diseases and the use in other cultures in southern Africa.	V	Interviews with traditional physicians in the Maseru district, the author's own experiences and observations from the Nek District of Qacha. Bibliographic search in books, unpublished data, and electronic databases.	Most of the species (13) are used to treat infertility. However, the pharmacological effects, active compounds, and toxicology of many of these plants are not yet known.
4	To document the local name of the medicinal plants used by men and women and known by the indigenous population for the treatment of reproductive diseases, in addition to exploring its secondary metabolites.	V	Interviews with traditional physicians in three villages. The percentage of the level of loyalty and of preference ranking, and the formulation score were systematically analyzed. Electronic databases were also used.	These data can be the most important resource for the new discovery of many bioactive principles.

5	To evaluate the effectiveness of the sandalwood surfaid, *maghze tukhme bakayin*, and *khaste tamar hindi* in the syndromic management of vaginal discharge.	II	Standard, randomized, single-blind, controlled study. The test group received 10 g of the test drug for 21 days, while the control group received a single dose of a standard drug, for both partners. The vaginal symptom score was used to assess discharge and the associated complaints. A similar visual scale was used to assess low back pain and low abdominal pain.	The formulation can effectively alleviate the disease with associated symptoms without side effects. It can be used in the syndromic treatment of vaginal discharge.
6	To investigate the effects of sea buckthorn oil supplementation on vaginal atrophy.	I	A total of 116 post-menopausal women were randomized in a double-blind, placebo-controlled study. It lasted 3 months, with 3 g of sea buckthorn (SB) oil or placebo oil daily. At the beginning and at the end, the vaginal health factors were assessed by a gynecologist, vaginal pH and humidity were measured, and the vaginal health index was calculated. The symptoms of atrophy and menopause were assessed. Serum samples were collected for the analysis of circulating lipids, liver enzymes, and C-reactive protein.	According to its effects on vaginal health, the oil was indicated as a potential alternative for women who cannot use estrogen treatment for vaginal atrophy.
7	The study was designed to document detailed ethno-gynecological knowledge of selected remote regions of the Pashtun tribe in northwest Pakistan.	IV	The study was carried out in six remote areas of the Khyber Pakhtunkhwa (KPK) province, Pakistan. It was documented from January to June 2014. The informants' consensus was the method to highlight the plants widely used for specific diseases.	Plants with high values of Informant Consensus Factor (ICF) must be checked for their *in vitro* and in vivo validation. The girls must be educated about the importance of the ethnogno-ecological practices in order to preserve this valuable knowledge.
8	To analyze the effects of flax seeds on menopausal symptoms and quality of life during the menopause period.	III	This experimental research was planned to consist of pre-tests, post-tests, and a control group of women who used flax seeds and received training and hormone replacement therapy (HRT).	There was a decrease in menopausal symptoms and an improvement in life among the women who used flax seeds for three months. The results serve as a reference for clinical care providers.
9	To assess the effectiveness of 40 mg of black cohosh extract/day in relieving moderate to severe menopause symptoms and improving quality of life of Thai women.	II	Randomized clinical trial, double-blind, and placebo-controlled. It was conducted in a menopause clinic at a university hospital during 2011-2013. The participants were Thai peri- or post-menopausal women who were at least 40 years of age and had moderate to severe Kupperman index (KI) symptoms.	40 mg of black cohosh extract/day is no superior to placebo for relieving moderate to severe symptoms of menopause or improving quality of life scores in Thai women.

Chart 3 – Presentation of the medicinal plants cited in the studies of the integrative review. Redenção, Ceará, Brazil, 2019

Scientific name		Author/ Year	How to use	Gynecological problems mentioned
1	Sea buckthorn oil (*Hippophaë rhamnoides*)	Larmo, et al. (2014)	Oil	Inflammation of the genitals and of the uterus; relieves the symptoms associated with dryness of the genital mucous membranes (vaginal atrophy)
2	*Cimicifuga racemosa* (black cohosh)	Tanmahas, et al. (2015)	Decoctions	Moderate to severe menopause symptoms
3	*Dang-Gui-Sha-Yao-San, Wen-Jing-Tang, Jia- Wei-Xiao-Yao-San, Zou-Gui-Wan, You-Gui- Wan, Leonurus japonicus, Fructus ligustri lucidi, Cyperus rotundus L., Dipsacus asper Wall, Semen Cuscutae*	Hung, et al. (2016)	Decoctions	Improves ovarian endocrine dysfunction, female infertility, treatment of ovulation disorders, suppresses contraction of uterine smooth muscle, and acts as an antioxidant effect in the uterus
4	*Gunnera perpensa*	Hung, et al. (2016)	Decoctions	Maternal reproductive diseases (such as dysmenorrhea), conditions, anti-inflammatory activity, menstrual pain, and uterine toning
5	*Withania somnifera*	Hung, et al. (2016)	Decoctions and juices	Infertility
6	*Scabiosa columbaria*	Hung, et al. (2016)	Decoctions	Treatment for infertility, dysmenorrhea, treatment of uterine disorders
7	*Malva parviflora; Xysmalobium undulatum; Dicoma anomala; B. setifera*	Adhikari, et al. (2017)	Decoctions	Treatment of unspecified uterine disorders and leukorrhea

From the full reading of the articles, the selected studies were grouped for discussion according to their main theme, as follows: Menopause; Infertility; Gynecological infections; Hormonal disorders.

DISCUSSION

Menopause

Menopause is a natural and physiological mechanism for women. To increase quality of life in terms of physical, mental, and social health, these women need information, support, and regular monitoring from a health professional[12].

The transition to menopause or to peri-menopause is the reproductive life stage of women that begins a few years before menopause, when the ovaries gradually begin to produce less estrogen, in which many women experience symptoms such as hot flashes,

irregular periods, and difficulty sleeping[13].

In a study[12], the herbal estrogens inserted in the women's diet increased the level of estrogen, preventing the symptoms caused by menopause. Phytoestrogens are chemicals that can act as natural estrogen in the human body. There is no synthesis or deposition of these compounds in the body, and their only source is an intensive herbal diet containing these compounds. They can be found in grains, vegetables, and fruits, and their best known and enriched sources of phytoestrogens are flax seeds and soybeans.

The menopausal women who received a diet rich in flax seeds and soybeans for 12 weeks experienced a significant decrease in the menopausal symptoms, such as hot flashes and vaginal dryness, with the preference for flax seeds because of its ease of use and absence of side effects, such as the ones find in HRT[12].

Vaginal atrophy, thinning, and lower lubrication of the vaginal mucosa are associated with reduced levels of estrogen in menopause. The atrophic tissue is prone to inflammation, bleeding, and ulceration. Another study[14] highlighted the use of sea buckthorn oil, traditionally used in Central Asia to treat inflammations of the genitals and of the uterus. In clinical trials, the intake of the oil demonstrated beneficial effects on serum lipids and lipoproteins, dry eye, markers of endothelial inflammation, and platelet aggregation.

The use of phytotherapy in gynecological problems also highlighted the neroli oil (*Citrus aurantium L. var. amara*), a phytotherapic compound that, in addition to minimizing the symptoms of menopause, also increases sexual desire and reduces post-menopausal blood pressure. The oil can be considered an innovative and useful intervention in reducing stress and improving the endocrine system[15].

Cimicifuga racemosa was one of the phytotherapy medicines used to relieve the symptoms of menopause, especially in North America. Its rhizome and root extract contain many active ingredients, including triterpene glycosides and phenolic acids[16], highlighting its use in improving the quality of life of Thai women with symptoms of moderate to severe menopause.

Approximately 30% of the participants reported side effects, most of which were mild and self-limiting, without treatment or completion of the study, since the medication did not demonstrate hepatotoxicity in the participants. The study was conducted with the extract of 1.28 mg of active ingredients for 12 weeks[16].

Infertility

Female infertility is defined as the inability to conceive at childbearing age, even if there has been frequent and unprotected sex for at least one to four years. Its main causes are ovulatory disorders, endometriosis, pelvic adhesion, acquired (fibroids), tubal block, and other uterine and fallopian abnormalities, indicating the use of Traditional Chinese Medicine (TCM), with the adoption of Integrative and Complementary Therapies[17].

Contributing to the authors above, a study[18] recorded 32 plant species that were used to treat diverse gynecological and obstetric problems. Dysmenorrhea, infertility, and menorrhagia were highlighted. Dysmenorrhea was treated with 21 plant species, infertility with 14, and menorrhagia with 10. Bridelia catartica was the plant species most mentioned by women for the treatment of gynecological and obstetric problems. For the most part, the preparation methods of the plants were mixtures administered orally.

The main herbs described for women with infertility were *Dang-Gui-Sha-Yao-San*, a most commonly prescribed herbal formula (17.25%), followed by *Wen-Jing-Tang* (16.35%), *Jia-Wei-Xiao-Yao-San* (14.85%), *Zou-Gui-Wan* (14.57%) and *Gui-Pi-Wan* (9.97%). *Semen Cuscutae* (27.40%) was also common in the prescription of CHP, followed by *Leonurus japonicus* (13.55%), *Fructus ligustri lucidi* (13.43%), *Cyperus rotundus L.* (12.13%), and *Dipsacus asper Wall* (11.71%), also highlighting that, in addition to visiting the gynecologist,

most of the patients (96.17%) also seek TCM treatments[17].

Reproductive problems such as sterility, menstrual problems, and uterine disorders can be treated with nearly 87 different botanical species. *Gunnera perpensa* is the most used to fight a number of reproductive diseases, having other pharmacological uses, such as analgesic, anti-inflammatory, antispasmodic, and uterotonic, which could explain its use for menstrual pain and toning of the uterus[19].

Other authors[20] recommended *Hibiscus rosa-sinensis*, used to cure irregular menstruation; *Cynodon dactylon* juice, used against uterine bleeding; *Abroma augusta* roots against gonorrhea; and *Bombax ceiba* frutis to cure female infertility and other gynecological disorders. Some rare but medicinally important plant species, like *Andrographis paniculata*, have also been reported in the treatment of sexual disorder and vaginitis.

Gynecological infections

Vaginal infection is one of the most common gynecological infections and one of the main reasons why women make appointments with a gynecologist. Reproductive tract infections have become a silent epidemic that plagues women's lives and represents a problem in developing countries, being more frequent in women aged between 25 and 35 years old. In 96% of the patients, the pH was high, which is a sensitive indicator for *Gardnerella vaginallis*[21].

Vaginitis is reported as a syndrome mainly caused by three groups of microbial pathogens (bacteria, yeasts, and protozoa), accounting for 90% of the diseases. The astringent properties of the Sandalwood, Tamarind, and Bakayin plants in improving vaginal discharge are highlighted[21].

Other studies confirm the use of medicinal plants in women's health care. The *Alternanthera brasiliana L, Alternanthera sp, Apium graveolens L, Artemisia vulgaris L, Tagetes minuta L, Impatiens balsamina L, Bryophyllum pinnatum L,* and *Piptadenia gonoacantha* species were the most indicated for the treatment of gynecological diseases, such as uterine infections, menstrual cramps, and inflammation of the ovaries[22].

Lemon grass (*Cymbopogon citratus*), bushy matgrass (*Lippia alba*), and corama (*Kalanchoe brasiliensis*) are also mentioned as medicinal plants used by the women in the treatment of minor crises of uterine colic, and ovarian and uterine inflammation[23].

Hormone disorders

Polycystic ovary syndrome (PCOS) is a complex reproductive and endocrine disorder, characterized by menstrual irregularities (oligomenorrhea/amenorrhea), hyperandrogenism, polycystic ovaries, and metabolic and psychological disorders, affecting up to 18% of the women of reproductive age. Approximately two out of five women with PCOS report the use of phytotherapy because these herbal medicines contain biologically active chemicals that can alter the reproductive endocrinology in women with PCOS[24].

The use of medicinal plants in the treatment of gynecological diseases studied by the authors[25] shows that most of the plants (19) were used to control complications during menstruation, while others (11) were used in the treatment of gonorrhea and pregnancy. This study also highlighted the parts of plants used by the women: whole plants (33%) and leaves (31%) for various ethno-medicinal preparations in the area of gynecology. Women in Pakistan regions mainly use herbs (59%) for the preparation of ethno-medicines, followed by trees (26.9%).

In most of the remote areas, medicinal herbs are the main ingredients of the local medications and considered the first choice in the treatment of gynecological diseases[25]. The *Justicia adhatoda, Schinus molle, Convolvulus arvensis, Cyperus rotundus,* and *Hypericum*

perforatum plants were identified as being effective in relieving menstrual complications, while Melia azadirachta and Solanum surattense were administered to treat gonorrhea[25].

Diverse ethnographic data showed that the majority of the women interviewed (44%) were between 61 and 70 years old, clearly indicating that traditional knowledge is restricted to the older adults in these regions, due to the lower interest of the younger generation[25].

In another study[26], women with PCOS report the benefits of marjoram tea, signaling an improvement in insulin sensitivity and a reduction in the androgen levels. However, more research studies are needed to confirm these results and to investigate the active components and mechanisms that contribute to these potential beneficial effects of marjoram.

CONCLUSION

The findings of this study indicate a low number of articles that address phytotherapy as an intervention in women's health. It is important to highlight that medicinal plants can be used to reduce the signs of menopause and to treat infertility, gynecological infections, and hormonal disorders.

The synthesis of knowledge indicated the need to intensify efforts to conduct more research studies on phytotherapy as an intervention in women's health in the treatment of gynecological diseases, without disregarding traditional knowledge about medicinal plants that is transmitted between generations.

The participation of health professionals in the orientation of the population regarding the use of phytotherapy as an intervention in gynecology turns out to be indispensable, considering the peculiarity of each plant and its adequate use. In addition, the benefits of using medicinal plants for the female population are the following: reduced health costs, health promotion, and disease prevention, with scientifically-proven effectiveness and combination of empirical knowledge.

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