

JOURNAL OF PHARMACEUTICAL SCIENCE AND BIOSCIENTIFIC RESEARCH (JPSBR)

(An International Peer Reviewed Pharmaceutical Journal that Encourages Innovation and Creativities)

Herbal remedies for treatment of female related disease

Jigna Patel,1* Madhuri Hinge 1

1. Pharmaceutical Quality Assurance, ROFEL Shri G. M. Bilakhia College of Pharmacy, Gujarat, India

Article History:

Received 28 April 2023
Revised 11 October 2023
Accepted 06 December 2023
Available online 26 December 2023

Citation:

Patel J. Hinge M. Herbal remedies for treatment of female related disease J Pharm Sci Bioscientific Res. 2024. 12(1): 40-49

*For Correspondence:

Patel J.

Pharmaceutical Quality Assurance, ROFEL Shri G. M. Bilakhia College of Pharmacy, Gujarat, India.

(www.jpsbr.org)

INTRODUCTION [1-10]

Traditional herbal plant is still preferred as primary health care system in my communities, with over 60% of world's population and about 80% in developing countries depending on their medical purpose. Female health refer to health issue specific to female anatomy. Herbal remedies are plants used like medicine. People use herbal remedies to help prevent cure diseases. [1] Herbs can be defined generally in commerce as a plant, plant part or extract there of used for flavour, fragrance or medicinal purposes. Traditional herbal plant are naturally occurring substances with minimal or no industrial processing that have been used to treat various illnesses.^[2]

Herbal plant are getting significant attention in global health debates. Traditional medicine has established promotive, preventive, curative and rehabilitative role. Herbal therapy has reached a turning point. It is fighting to be recognised as a science a particular field with its own identity.^[3]

It has become necessary to show that herbal therapy can match other fields of medicine in the thoroughness of its scientific work and its practical use.^[4] The main reason for the use of traditional medicine is due to their

ABSTRACT:

Traditional herbal plant is still preferred as primary health care system in my , with over 60% of world's population and about 80% in developing countries depending on their medical purpose. Female health refers to health issue specific to female anatomy. These often relate to structure such as female genitalia and breast or to condition caused by hormones specific to female. Female health issue includes gynaecological cancer, PCOS, endometriosis, breast cancer, pregnancy issues. Benefit of herbal therapy compared to conventional therapy is that herbal therapy is safe with lesser side effects and presence of multiple active compounds in medicinal herbs altogether provides a potentiating effect. This review focus on different female diseases and some popular herbal remedies for treatment of this condition.

KEYWORDS: : Herbal Drug, Herbal plant, PCOD, Endometriosis, Uterine fibroids, Interstitial cystitis, Female related cancer.

affordability, accessibility, and cultural beliefs. The World Health Organization estimates that majority of the people depend on herbs for their health care. The most commonly used treatments are surgical, radiation, and hormone treatments but they have severe side effects. Medicinal plants can be promising source of novel therapeutic agents. [5]

The main use of plant to cure several kinds of human diseases has along history. Various parts of plant such as leaf, steam, bark, root, fruits, etc are used. [6]

FEMALE REALTED DISEASES:

Female experience of health and disease differ from those of men, due to unique biological, social and behavioral conditions. Biological differences vary from phenotypes to the cellular biology, and manifest unique risks for the development of ill health. health issues and conditions, from pregnancy and menopause to gynaecological conditions, such as uterine fibroids and pelvic floor disorders. The health topics listed below affect women only.^[7]

Gynaecological health and disorders affecting women include menstruation and menstrual irregularities; urinary tract health, including urinary incontinence and pelvic

floor disorders; and such disorders as bacterial vaginosis, vaginitis, uterine fibroids, and vulvodynia. Pregnancy issues include pre-pregnancy care and prenatal care, pregnancy loss (miscarriage and stillbirth), preterm labor and premature birth, sudden infant death syndrome (SIDS), breastfeeding, and birth defects. Disorders related to infertility include uterine fibroids, polycystic ovary syndrome, endometriosis, and primary ovarian insufficiency. [8]

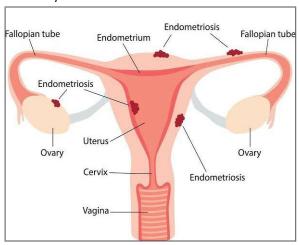


Fig.1 Female reproductive system

1 POLYCYSTIC OVARIAN SYNDROME (PCOS):

Polycystic Ovarian Syndrome is a complex disorder in women in which theovaries become enlarged with many 'cysts' which are in fact small undeveloped follicles. Over time there is thickening and fibrosis of the ovarian casing which prevents any follicles which do ripen from being released.

PCOS is called as a Stein Leventhal syndrome. Itis one of the most common endocrine system disorders that affect women in their reproductive age.^[9]

Polycystic ovary syndrome (PCOS) is a heterogeneous disorder characterized by elevated androgen levels, menstrual irregularities and small cysts on one or both ovaries. The disorder can be morphological (polycystic ovaries) or predominantly biochemical (hyperandrogenemia). [10]

Causes of PCOS:

- ✓ Strong adrenal stimulation during childhood
- ✓ Increased levels of insulin
- ✓ Genetic predisposition
- ✓ Contraceptive pills
- ✓ Hormonal imbalance
- ✓ Stress^[11]

Sign and symptoms of PCOS:

Irregular or absence of periods

Acne

Excess body hair

Weight gain or difficulty losing weight Pain in Pelvic region Infertility (difficulty becoming pregnant) Enlarged ovaries with numerous small cysts Acanthosis nigricans^[11]

2 ENDOMETRIOSIS:

Endometriosis is a chronic disease affecting between 5% and 15% of women of reproductive age. Endometriosis is a benign sex hormone-dependent disease, characterized by the presence and growth of endometrial tissue outside the uterus. The tissue responds trusted Source hormones that affect the menstrual cycle in the same way that endometrial tissue does. It swells and bleeds like endometrial tissue, but there is nowhere for the waste tissue and blood to go.

The tissue is not cancerous, but it can lead to scarring and adhesions. It can block the fallopian tubes, and cysts can form due to trapped blood. Tissues can fuse, leading to changes in the reproductive organs.^[12]

The tissue can develop anywhere in the body, but it usually affects the pelvic area, including:

- ✓ the ovaries
- ✓ the fallopian tubes
- ✓ tissues that support the uterus
- ✓ the outside of the uterus

The body usually expels this type of tissue during menstruation, but the tissue that forms in endometriosis may remain in the body, which can lead to inflammation.

As tissue decomposes, scar tissue can form. [13]

Causes of endometriosis:

- ✓ Pelvic pain
- √ Fertility reduction^[13]

2.2.2 Sign and symptoms of endometriosis:

- ✓ Tissue infiltration
- ✓ Lumbar pain
- ✓ infertility
- ✓ Dyschezia
- ✓ Pain during micturition
- ✓ Dyspareunia^[14]

3 UTERINE FIBROIDS:

Uterine fibroids are noncancerous growths of the uterus that often appear during childbearing years. uterine fibroids aren't associated with an increased risk of uterine cancer and almost never develop into cancer. Fibroids can vary a lot in size, shape, and location. They can show up in your uterus, uterine wall, or on its surface. They can also attach to your uterus by a stalk- or stem-like structure.

Uterine fibroids called leiomyomas or myomas.[15]

Causes of uterine fibroids:

Experts don't know exactly why you get fibroids. Hormones and genetics might make you more likely to get them

Hormones: Estrogen and progesterone are the hormones that make the lining of your uterus thicken every month during your period. They also seem to affect fibroid growth. When hormone production slows down during menopause, fibroids usually shrink.

Genetics: Researchers have found genetic differences between fibroids and normal cells in the uterus.

Other growth factors: Substances in your body that help with tissue upkeep, such as insulin-like growth factor, may play a part in fibroid growth.^[16]

Extracellular matrix (ECM): ECM makes your cells stick together. Fibroids have more ECM than normal cells, which makes them fibrous. ECM also keeps growth factors in it and causes cells to change. [17]

Sign and symptoms uterine fibroids:

Heavy menstrual bleeding, Menstrual periods lasting more than a week, Pelvic pressure or pain, Frequent urination, Difficulty emptying the bladder, Constipation, Backache or leg pains^[18]

4 INTERSTITIAL CYSTITIS:

Interstitial cystitis is a chronic condition causing bladder pressure, bladder pain and sometimes pelvic pain. The pain ranges from mild discomfort to severe pain. The condition is a part of a spectrum of diseases known as painful bladder syndrome.

Bladder is a hollow, muscular organ that stores urine. The bladder expands until it's full and then signals of brain that it's time to urinate, communicating through the pelvic nerves. This creates the urge to urinate for most people. [19]

With interstitial cystitis, these signals get mixed up and feel the need to urinate more often and with smaller volumes of urine than most people. Interstitial cystitis most often affects women and can have a long-lasting impact on quality of life.^[20]

Causes of interstitial cystitis:

The exact cause of interstitial cystitis isn't known, but it's likely that many factors contribute.

Defect in the protective lining (epithelium) of the bladder: A leak in the epithelium may allow toxic substances in urine to irritate your bladder wall.

Emotional troubles: The chronic pain and interrupted sleep associated with interstitial cystitis may cause emotional stress and can lead to depression, autoimmune reaction, heredity infection or allergy, Sexual intimacy problem^[21].

Signs and symptoms of interstitial cystitis:

The signs and symptoms of interstitial cystitis vary from person to person. symptoms may also vary over time, periodically flaring in response to common triggers, such as menstruation, sitting for a long time, stress, exercise and sexual activity.

Interstitial cystitis signs and symptoms include:

Pain in your pelvis or between the vagina and anus in women, Pain between the scrotum and anus (perineum) in men, Chronic pelvic pain, A persistent, urgent need to urinate, Frequent urination, often of small amounts, throughout the day and night (up to 60 times a day), Pain or discomfort while the bladder fills and relief after urinating, Pain during sex.^[22]

5 GYNECOLOGICAL CANCER:

Gynecological cancer is any cancer that starts in a woman's reproductive organs. Cancer is always named for the part of the body where it starts. Gynecologic cancers begin in different places within a woman's pelvis, which is the area below the stomach and in between the hip bones.

Type of gynecological cancer:

- Cervical cancer: It begins in the cervix, which is the lower, narrow end of the uterus. (The uterus is also called the womb.)
- 2) Ovarian cancer: it begins in the *ovaries*, which are located on each side of the uterus.
- 3) Uterine cancer: It begins in the *uterus*, the pearshaped organ in a woman's pelvis where the baby grows when she is pregnant.
- 4) Vaginal cancer: it begins in the *vagina*, which is the hollow, tube-like channel between the bottom of the uterus and the outside of the body.
- 5) Vulvar cancer: it begins in the *vulva*, the outer part of the female genital organs.

Sign and symptoms:

Abnormal vaginal bleeding or discharge is common on all gynecologic cancers except vulvar cancer. Feeling full too quickly or difficulty eating, bloating, and abdominal or back pain are common only for ovarian cancer. Pelvic pain or pressure is common for ovarian and uterine cancers. More frequent or urgent need to urinate and/or constipation are common for ovarian and vaginal cancers. Itching, burning, pain, or tenderness of the vulva, and changes in vulva color or skin, such as a rash, sores, or warts, are found only in vulvar cancer.

42

6 BREAST CANCER:

Breast cancer is one of the most common cancers among women, It's most likely to affect women over the age of 50.

Breast cancer originates in your breast tissue. It occurs when breast cells mutate (change) and grow out of control, creating a mass of tissue (tumor). Like other cancers, breast cancer can invade and grow into the tissue surrounding your breast. It can also travel to other parts of your body and form new tumors. When this happens, it's called metastasis.^[25]

1 Types of breast cancer:

- Infiltrating (invasive) ductal carcinoma: Starting in your milk ducts of your breast, this cancer breaks through the wall of your duct and spreads to surrounding breast tissue. Making up about 80% of all cases, this is the most common type of breast cancer.^[26]
- 2) Ductal carcinoma in situ: Also called Stage 0 breast cancer, ductal carcinoma in situ is considered by some to be precancerous because the cells haven't spread beyond your milk ducts. This condition is very treatable. However, prompt care is necessary to prevent the cancer from becoming invasive and spreading to other tissues.
- 3) Infiltrating (invasive) lobular carcinoma: This cancer forms in the lobules of your breast (where breast milk production takes place) and has spread to surrounding breast tissue. It accounts for 10% to 15% of breast cancers. [27]
- 4) Lobular carcinoma in situ: It is a precancerous condition in which there are abnormal cells in the lobules of your breast. It isn't a true cancer, but this marker can indicate the potential for breast cancer later on. So, it's important for women with lobular

- carcinoma in situ to have regular clinical breast exams and mammograms.
- 5) Triple negative breast cancer (TNBC): Making up about 15% of all cases, triple negative breast cancer is one of the most challenging breast cancers to treat. It's called triple negative because it doesn't have three of the markers associated with other types of breast cancer. This makes prognosis and treatment difficult.^[28]
- 6) Inflammatory breast cancer: Rare and aggressive, this type of cancer resembles an infection. People with inflammatory breast cancer usually notice redness, swelling, pitting and dimpling of their breast skin. It's caused by obstructive cancer cells in their skin's lymph vessels.
- Paget's disease of the breast: This cancer affects the skin of your nipple and areola (the skin around your nipple). [29]

Sign and symptoms:

- A change in the size, shape or contour of your breast.
- A mass or lump, which may feel as small as a pea.
- A lump or thickening in or near your breast or in your underarm that persists through your menstrual cycle.
- A change in the look or feel of your skin on your breast or nipple (dimpled, puckered, scaly or inflamed).
- Redness of your skin on your breast or nipple.
- An area that's distinctly different from any other area on either breast.
- A marble-like hardened area under your skin.
- A blood-stained or clear fluid discharge from your nipple.^[30]

HERBAL MEDICINE USED FOR FEMALE RELATED DISEASES::

1 Polycystic Ovarian Syndrome

Table1 Herbs used for PCOD

Sr No	Name	Botanical Name	Family	Parts used in	Chemical constituent	MoA	Ref
1	Bitter melon	Momordica charantia	Curcurbitaceae	Fruit	Glycoside	Adjuvant therapy of hirsutism	31
2	Indian madder	Rubia cordifolia	Rubiaceae	Root	Resin, Phenolic compounds	Antiandrogen properties	31
3	Angelica	Angelica glauca	Umbelliferae	Root	Coumarin,	improving effect on disturbed hormones and ovulation rate	32
4	Myrrh	Commiphora molmol	Burseraceae	Oil	Volatile oil	lipid metabolism	32
5	Seasame	Sesame indicum	Pedaliaceae	Seeds	Protein	Improve insulin sensitivity	32
6	Rose	Rosa spp	Rosaceae	Flower	Carotenoid	improves insulin sensitivity	33
7	Black seed	Nigella sativa	Ranunculaceae	Seed	Fatty acid	improves insulin sensitivity	33
8	Garlic	Allium sativum	Liliaceae	Flower	Sulphides	Antiandrogen and	33

				buds		phytoestrogen	
9	Triphala	Emblica Officinalis	Euphorbiaceae	Fruits	Tannin	Antioxidant activity	31
10	Cummin	Cuminum cyminum	Umbeliferae	Fruits	Volatile oil	lipid metabolism	34
11	Betel Nut	Areca	Palmae	Seed	Alkaloid	Atiandrogen	32
12	Coliic Root	Dioscorea Villosa	Dloseoreaceae	Root	Steroidal Saponin	Attenuated nerve Growth Factor	34
13	Kelp	Nereocystis leutkema	Laminariaceae	Seaweed	Algin	Improve insulin sensitivity	35
14	Dandelion	Taraxacum officinale	Asteraceae	Whole plant	Germacronalide	Antioxidant activity	35
15	Bladder wrack	Fucus vesiculosus	Fucaceae	Aerial part	lodine, bromide	reduction in hirsutism	32
16	Sqauw vine	Mitchella repens	Rubiaceae	Aerial part	Resin	Antiandrogen properties	35
17	Oat straw	Avena sativa	Poaceae	Seed	Carbohydrate	reduction in hirsutism	35
18	Mugwort	Artemisia vulgaris	Asteraceae	Leaves	Essential oil	lipid metabolism	34
19	Blue cohosh	Caulophyllum thalictroides	Berberidaceae	Root	saponin	Attenuated nerve Growth Factor	33
20	Dong quai	Angelica sinesis	Apiaceae	Root	Coumarine	reduction in hirsutism	33
21	Hops	Humulus lupulus	Cannabinaceae	Female cons	Essential oil	lipid metabolism	33
22	Alfalfa	Medicago sativa	Fabaceae	Seed	Protein	Improve insulin sensitivity	34
23	Sarsaparilla	Smilax officinalis	Smilacaceae	Rhizome	Resin	Antiandrogen properties	35
24	Saraca	Saraca indica	Fabaceae	Flower	Tannin	reduction in hirsutism	35
25	Black Cohosh	Actaea racemosa	Ranunculaceae	Root	Glycoside	Antiandrogen and phytoestrogen	35
26	Red Clover	Trifolium pretense	Fabaceae	Flower	Glycoside	Antiandrogen and phytoestrogen	35

2 Endometriosis:

Table 2. Herbs used for Endometriosis

Sr No	Name	Botanical Name	Family	Parts use	ed in Chemical constituent	MoA	Ref
1	Curcumin	Curcuma longa	Zingiberaceae	Root	Diferuloylmethane,	Reduced estradiol	36
2	Chamomile	Matricaria chamomilla	Asteraceae	Flower	demethoxycurcumin Terpenoids, flavonoids, lactones	reduce the sympof premenstrual syndrome	otoms 36
3	Peppermint	Mentha piperita	Lamiaceae	leaves	Limonene, menthol	Reduced estradiol	36
4	Lavender	Lavandula	Lamiaceae	Flower	Linalool, camphor	Prevent blood loss	36
5	Ginger	Zingiber officinale	Zingiberaceae	Rhizome root	andPhenolic, terpane	Reduce heavy menstrual fl	ow 36
6	Ashwagandha	Withania somnifera	Solanaceae	root berry	andAlkaloids, steroida lactones	lreduce the symp of premenstrual syndrome	otoms 37
7	Black cohosh	Actaea racemosa	Ranunculaceae	Root	Glycoside	Prevent blood loss	37
8	Blackhow	Viburnum prunifolium	Adoxaceae	Bark	scopoletin, aesculetin, salicin	Reduce heavy menstrual fl	ow 37
9	Cinnamon	Cinnamomum verum	Lamiaceae	Bark	cinnamaldehyde	Reduced estradiol	37
10	Florida ishpoison tree	fPiscidia piscipula	Fabaceae	Root	glycoside	Reduce endometriotic lesion	ons 38
11	Wild yam	Dioscorea villosa	Dioscireaceae	Root	Saponin	Reduce endometriotic lesion	ons 38
12	Purple coneflower	Echinacea purpurea	Asteraceae	Root	Alkamides, polysaccharides	Reduced estradiol	38

3 Uterine fibroids:

Table 3. Herbs used for Uterine fibroids

Sr	Name	Botanical Name	Family	Parts use	dChemical constituent	MoA	Ref
No				in			
1	Goldenseal	Hydrastis	Ranunculaceae	Root	alkaloids hydrastine, b	reducing pain and inflammation in	39
		canadensis			erberine	the uterus	
2	Ginger	Zingiber officinale	Zingiberaceae	Rhizome	Phenolic, terpane	Relive heavy bleeding	39
3	False unicor	nChamaelirium	Melanthiaceae	Seed	steroidal saponins	Ease heavy menstrual periods	39
	root	luteum					
4	Turmeric	Curcuma longa	Zingiberaceae	Root	demethoxycurcumin	Relive heavy bleeding	40
5	Black Cohosh	Actaea Racemosa	Ranunculaceae	Root	Glycoside	Relive heavy bleeding	40
6	Hindberry	Rubus idaeus	Rubuceae	Fruit	Tannis	normalises the flow of blood during	40
						the menstrual cycle.	
7	Dandelion	Taraxacum	Asteraceae	Root, leaf	Carbohydrates, fatt	ymaintain hormonal balance and	41
					acid	reduce the oestrogen level in the blood circulation.	
8	Ginger	Zingiber officinale	Zingiberaceae	Rhizome	Phenolic, terpane	enhance blood flow to the uterus,	41
				and root		ovaries and 9fallopian tubes.	
9	Burduck tea	Arctium	Asteraceae	Root	Amino acid	d,cleanses and detoxifies excess	41
					carbohydrate	oestrogen	
10	cinnamon twig	gCinnamomum	Lauraceae	Bark	cinnamaldehyde,	Relive heavy bleeding	41
		cassia			styrene		

4 Interstitial cystitis:

Table 4. Herbs used for Interstitial cystitis

Sr No	Name	Botanical Name	Family	Parts used in	Chemical constituent	MoA	Ref
1	Rehmannia	Rehmannia glutinosa	<u>Orobanchaceae</u>	Flower	vitamins A,	B,Anti inflammatory activity	42
	Kava	Piper methysticum	Piperaceae	Root	C, and D Flavanones,ch Icones	a Anesthetic effect GABA activity	42
3	Mashmallow	Withania sommifera	Malvaceae	Root	Glucose	Healing of mucosal membrane of bladder	42
4	Licorice	Glycyrrhiza glabra	Fabaceae	Root	glycyrrhizinic acid	Healing of mucosal membrane of bladder	42
5	Aloe vera	Aloe barbadensi miller	sLiliaceae	Leaves	Aloin	Anti inflammatory activity	42
6	Dogwood	Cornus sangainea	Cornaceae	Bark	Inositol	Antihistamine activity	43
7	Cape jasmine	Gardenia jasminoides	Rubiacea	Flower	Linalool	Relex bladder	43
8	Curcaligo	Curculigo orchiods	Hypoxidaceae	Root	Curculigosides	s induced cystitis upregulates muscarinic receptors	43
9	Rhubarb	Garden rhubard	Rolygonaceae	Root	anthraquinones	e Anti inflammatory activity	43
10	Psoralea	Psoralea corylifolia	Fabaceae	Seed	Coumarin	Anti inflammatory activity	43
11	Rehmannia	Rehmannia giutinosa	Scrophvlariaceae	Root	Catalpol	Anesthetic effect GABA activity	43

5 Carvical Cancer:

Table 5. Herbs used for Carvical Cancer

Sr No	Name	Botanical Name	Family	Parts used in	Chemical const	ituent	MoA			Ref
1	Malabar catmint	anisomeles malabarica	Lamiaceae	Seed	anisomelic ovatodiolide, citral	geranic	acid,antispasmodi acid,antipyretic, properties	c, and	diaphoretic, antiperiodic	

2	Black raspberrie	sRubus	Rosaceae	Fruit	gallic acid, protocatechui	cgrowth inhibitory and apoptotic	44
		occidentalis			acid, procyanidin	activating activities	
3	Indian	boswellia serrat	a Burseraceae	Bark	Monoterpene, diterpene	,apoptosis in cancerous cells	44
	frankincense				and triterpene, and boswellid acid	С	
4	Punarnava	Boerhavia diffusa	Nyctaginaceae	Root	alkaloids and amino acids	inhibit the proliferation of human cervical cancer cell line	45
5	Spanish cherry	Mimusops eleng	gi Sapotaceae	Bark, lea	foleic acid, linoleic acid palmitic acid	I,exhibit significant cytotoxic effect by inducing apoptosis	45
6	Cassia tora Linn	Senna tora	Leguminosae	Seed,	chrysophanol, emodin, and	dinduce a marked concentration-	45
				leaf	rhein	dependent inhibition on proliferation	
7	Cinnamon	Cinnamomum	Lauraceae	Bark	cinnamaldehyde, cinnamate	e, induced apoptosis through loss of	46
		cassia			cinnamic acid	mitochondrial membrane potential	
8	cummingcordia	Cordia dichotoma	Boraginaceae	Fruit	betulin, octacosanol	mitochondrial depolarization	46
9	Holy basil	Ocimum tenuiflorum	Lamiaceae	Leaves	isothymusin, CA, ursolic acid	Supress production of pro- angiogenic factor	46
10	guinea pepper	Aframomum	Zingiberaceae	Fruit	Caryophyllene,	inhibits cell proliferation	46
11	Fennel	melegueta Foeniculum vulgare	<u>Apiaceae</u>	Seed	anethole , pentanone	inhibits cell proliferation	46

6 Overian cancer:

Table 6. Herbs used for Overian cancer

Sr No	Name	Botanical Name	Family	Parts used in	Chemical constituent	MoA	Ref
1	Garlic	Allium sativum	Amaryllidaceae	bulb	allicin, diallyl sulfide	Antitumor activity	47
2	Ginger	Zingiber officinale	Zingiberacea	Rhizome	phenolic and terpene	For annihilating ovarian cancer cells	47
3	Green tea	Camellia sinensis	Theaceae	Leaves	Catechin, epicatechin	Cancer preventive activities	47
4	Ginkgo	Ginkgo biloba	Ginkgoaceae	Leaves	Terpene, lactones	Antioxidant, anti- angiogenic	47
5	Camptotheca	Camptotheca acuminate	Nyssaceae	Bark	Paclitaxel, Irinotecan.	Prevent the mutation of cells	48
6	Mayapple	Podophyllum peltatum	Berberidaceae	Leaves	Etoposide	process of enzyme-mediated DNA scission	48
7	Pacific yew	Taxus Brevifolia	Taxaceae	Bark	Taxine	inhibit cell proliferation	48
8	Neem	Azadirachta indica	Meliaceae	Leaves	Azadirachtin, nimbolinin	Enhancing the anti- proliferation effect of cisplatin	
9	Shatavari	Asparagus racemosu	s Asparagaceae	Root	rhamnos	Antioxidant	49
10	Lodhra	Symplocus racemosa	Symplocaceae	Bark	colloturine, loturidine	Antioxidant activity	49
12	Turmeric	Curcuma longa	Zingiberaceae	Root	demethoxycurcumin	reduce blood supply growth to tumours	49

7 Breast cancer:

Table 7. Herbs used for Breast cancer

Sr No	Name	Botanical Name	Family	Parts used in	Chemical constituent	МоА	Ref
1	sweet wormwood	Artemisia annua	Asteraceae	Leaves	Artemisinin	inhibition of angiogenesis, and ferroptosis	50
2 3	black mustard Red clover	Brassica nigra Trifolium pratense	Brassicaceae Fabaceae	Seed Seed	Allyl sothiocyanate Biochanin	Inhibits mitosis inhibits tumor growth	50 50

_							
4	Waterhyssop	Bacopa monnieri	Plantaginaceae	Steam	Bacosine	Anti-metastatic activity.	51
5	Turmeric	Curcuma longa	Zingiberaceae	Root	Curcumin	Chemopreventive an antitumoral activities,	d 51
7	Roselle	Hibiscus sabdariffa	Malvaceae	Fruits	Delphinidin 3-sambubioside	induces autophagy and necrosis	51
7	Angico	Parapiptadenia rigida	Fabaceae	Bark	Epicatechin gallat	inhibits tumorigenesis	51
8	Liquorice	Glycyrrhiza glabra	Fabaceae	Root	Glycyrrhetinic acid	Inhibition of proliferation	52
9	Grapefruit	Citrus paradise	Rutaceae	Fruit	Lycopene	Inhibition of cell cyc progression	e 52
10	Apricot	Prunus armeniaca	Rosaceae	Fruit	Lycopene	Inhibition of cell cyc progression	e 52
11	John's wort	Hypericum perforatum	Hypericaceae	Flower	Protocatechuic acid	Apoptosis- inducing agent	52
12	Marjoram	Origanum majorana	Lamiaceae	Leaves	Ursolic acid	Ursolic acid	52

CONCLUSION:

Herbal medicines has been widely used by women globally for treatment of diseases and maintaining health. Herbal medicines have promising role in treatment of many disease and shown steady effect with minimal side effect as compare to mordern medicines. Various herbal supplements are available for treatment of female related diseases like endometriosis, gynecological cancer, breast cancer, etc. These herbal supplements, not only prevent diseases but also cure them. Herbal supplements may take time to cure but daily usage may treat the disease from its root.

REFERENCES:

- 1. Shrestha PM, Dhillion SS. Medicinal plant diversity and use in the highlands of Dolakha district, Nepal. Journal of Ethnopharmacology. 2003; 86(1):81-96
- 2. Miller LG, Murray WJ. Herbal medicinals: a clinician's guide. Routledge; 1998. 326
- 3. Asase A, Kokubun T, Grayer RJ, Kite G, Simmonds MS, Oteng-Yeboah AA, Odamtten GT. Chemical constituents and antimicrobial activity of medicinal plants from Ghana: Cassia sieberiana, Haematostaphis barteri, Mitragyna inermis and Pseudocedrela kotschyi. Phytotherapy research. 2008 Aug;22(8):1013-6.
- 4. Sarkar S, Zaidi S, Chaturvedi AK, Srivastava R, Dwivedi PK, Shukla R. Search for a herbal medicine: antiasthmatic activity of methanolic extract of Curcuma longa. Journal of Pharmacognosy and Phytochemistry. 2015;3(4):59-72.
- 5. Tilburt JC, Kaptchuk TJ. Bulletin of the World Health Organization. 86th edition 2008: 594-99.

- 6. Anonymous. Zanzibar Traditional and Alternative Medicine Policy, 2008.
- 7. WHO. Women's health, "World Health Organization", 2016.
- 8. International Health Conference, New York, World Health Organization, June 1946: 19–22.
- 9. Kovacs TG, Norman RJ. Polycystic Ovary Syndrome. Cambridge University Press; 2nd ed. 2007.
- 10. Dunne N, Slater W. The Natural Diet Solution for PCOS and Infertility: How to Manag Polycystic Ovary Syndrome Naturally. Natural Solutions for PCOS; 2006.
- 11. Elsheikh M, Caroline M. Polycystic Ovary Syndrome.Oxford University Press; 2008.
- 12. Leuenberger J, Kohl Schwartz AS, Geraedts K, Haeberlin F, Eberhard M, von Orellie S, Imesch P, Leeners B. Living with endometriosis: Comorbid pain disorders, characteristics of pain and relevance for daily life. European Journal of Pain Supplements. 2022 May;26(5):1021-38.
- 13. Leyland N, Casper R, Laberge P, et al. Endometriosis: Diagnosis and Management. Journal of Endometriosis. 2010;2(3):107-134.
- 14. Giudice LC. Clinical practice. Endometriosis. N Engl J Med 2010;362(25):2389-98
- 15. Bethea, Traci N., et al. "Correlates of exposure to phenols, parabens, and triclocarban in the Study of Environment, Lifestyle and Fibroids. The Journal of Exposure Science and Environmental Epidemiology, 2020: 117-136.
- 16. Ferri FF. Uterine fibroids. In: Ferri's Clinical Advisor 2019. Philadelphia, Pa.: Elsevier; 2019. https://www.clinicalkey.com. Accessed April 24, 2019.

- 17. Farris M, et al. Uterine fibroids: An update on current and emerging medical treatment options. Therapeutics and Clinical Risk Management. 2019;15:157.
- 18. De La Cruz MS, et al. Uterine fibroids: Diagnosis and treatment. American Family Physician. 2017;95:100.
- 19. Interstitial cystitis/painful bladder syndrome. National Institute of Diabetes and Digestive and Kidney Diseases. https://www.niddk.nih.gov/health-information/urologic-diseases/interstitial-cystitis-painful-bladder-syndrome. Accessed Sept. 8, 2021.
- 20. Pang R, et al. The Chinese approach to complementary and alternative medicine for interstitial cystitis/bladder pain syndrome. Translational Andrology and Urology. 2015;4:653.
- 21. Carrico D, et al. Guided imagery for women with interstitial cystitis: results of a prospective, randomized controlled pilot study. The Journal of Alternative and Complementary Medicine. 2018; 14:53.
- 22. Wein AJ, et al., eds. Bladder pain syndrome (interstitial cystitis) and related isorders. In: Campbell-Walsh Urology. 11th ed. Philadelphia, Pa.: Elsevier; 2016. http://www.clinicalkey.com. Accessed July 1, 2016.
- 23. Molassiotis A, Browall M, Milovics L. Complementary and alternative medicine use in patients with gynecological cancers in Europe. Int J Gynecol Cancer. 2006; 219–224
- 24. Swisher E M, Cohn D E, Goff B A. Use of complementary and alternative medicine among women with gynecologic cancers. Gynecol Oncol. 2002;84:363–367
- 25. American Cancer Society. Breast Cancer overview. https://www.cancer.org/cancer/breast-cancer.html Accessed 1/21/2022.
- 26. Azuero A, Benz R, Mcnees P, Meneses K. Comorbidity and predictors of health status in older rural breast cancer survivors. (https://pubmed.ncbi.nlm.nih.gov/24711982/)
 Springerplus. 2014;3:102. Accessed 1/21/2022.
- Centers for Disease Control and Prevention.

 Breast
- 28. Cancer. (https://www.cdc.gov/cancer/breast/) Accessed 1/21/2022.
- 29. DeSantis CE, Ma J, Goding Sauer A, Newman LA, Jemal A. Breast cancer statistics, 2017, racial disparity in mortality by state. (https://acsjournals.onlinelibrary.wiley.com/doi/full/10.3 322/caac.21412) A Cancer Journal for Clinicians. 2017;67(6):439-448. Accessed 1/21/2022.

- 30. National Cancer Institute. Breast cancer. (https://www.cancer.gov/types/breast?redirect=true)
 Accessed 1/21/2022.
- 31. Hudson T, Northrup C. Women's encyclopedia of natural medicine: alternative therapies and integrative medicine. McGraw-Hill Professional; 1999.
- 32. Kishore B, Hazra DK et al. Effects of an Indigenous Drug Formulation (Geriforte) on Hormonal Status. Asian Med J, 1983; 11:770.
- 33. Sharma HK, Sharma RK. Evaluation of Efficacy and Safety of Evecare® Syrup in Infertility due to Polycystic Ovarian Syndrome. Indian Journal of Clinical Practice 2010; 21(2): 129-32
- 34. Raman S, Palep HS. Alternative therapies in polycystic ovarian syndrome. Bombay Hosp J, 2010. 52(3): 345-351.
- 35. Siriwardini SAD, Karunathilaka LPA et al. Clinical efficacy of Ayurveda treatment regimen on Sub fertility with Poly Cystic Ovarian Syndrome (PCOS). Ayu, 2010; 31(1): 24-27.
- 36. Debra Rose Wilson, Ph.D., MSN, R.N., IBCLC, AHN-BC, CHT By Zawn Villines on February 11, 2020.
- 37. Traci C. Johnson, endometriosis, MD on March 04, 2022.
- 38. Ilhan M, Gürağaç Dereli FT, Akkol EK. Novel Drug Targets with Traditional Herbal Medicines for Overcoming Endometriosis. Curr Drug Deliv. 2019.
- 39. Wahlstrom, B.; Blennow, G., A study on the fate of curcumin in the rat. Acta Pharmacol Toxicol (Copenh),1978, 43, (2), 86-92.
- 40. 134.Ravindranath, V.; Chandrasekhara, N., Absorption and tissue distribution of curcumin in rats. Toxicology, 1980, 16, (3), 259-65.
- 41. Sexton, E.; Van Themsche, C.; LeBlanc, K.; Parent, S.; Lemoine, P.; Asselin, E., Resveratrol interferes with AKT activity and triggers apoptosis in human uterine cancer cells. Mol Cancer, 2006; 5:45
- 42. Whitmore KE. Complementary and alternative therapies as treatment approaches for interstitial cystitis. Rev Urol 2002;4 Suppl 1:S28-35
- 43. Bassaly R, Downes K, Hart S. Dietary consumption triggers in interstitial cystitis/bladder pain syndrome patients. Female Pelvic Med Reconstr Surg 2011;17:36-9.
- 44. Ganesh G, Abhishek T, Saurabh M, Sarada NC. Cytotoxic and apoptosis induction potential of Mimusops elengi L. in human cervical cancer (SiHa) cell line. Journal of King Saud University Science 2014;26:333-7.

- 45. Jain S, Dwivedi J, Jain PK, Satpathy S, Patra A. Medicinal plants for treatment of cancer: A brief review. Pharmacognosy Journal, 2016;8:87-102. 31.
- 46. Kma L. Roles of plant extracts and constituents in cervical cancer therapy. The Asian Pacific Journal of Cancer Prevention , 2013;14:3429-36.
- 47. Shaneza et al. Herbal Treatment For The Ovarian Cancer, SGVU Journal of Pharmaceutical Research & Education, 2018, 3(2), 325-329.
- 48. Agarwal N, Majeechandana, Chakraborthy GS. Natural herbs as anticancer drugs. International Journal of PharmTech Research. 2012; 4(3):1142-1153.
- 49. Umadevi M, Sampath KP, Bhowmik D, Duraivel S. Traditionally used anticancer herbs in International Journal of PharmTech Research. 2013; 1(3):56-74.
- 50. Liu P etal. Anti-cancer activities of allyl isothiocyanate and its conjugated silicon quantum dots. Scientific Reports. 2018;(1):1-11
- 51. Kakkar S, Bais S.A review on protocatechuic acid and its pharmacological potential. ISRN Pharmacology. 2014;(4):1-9
- 52. Mishra SR, Yadav PK, Nandhakumar P, Saini M, Kumar A, Kataria M.In vitro analysis of Bacosine as novel therapeutic agent for murine breast cancer. Proceedings of theNational Academy of Sciences, India Section B. 2019;(2):511-515

