

Systematic Review

Medicinal plants used during pregnancy, childbirth and postpartum care in India: a systematic review

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Received: 10 September 2023

Accepted: 25 September 2023

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ABSTRACT

Use of plant medicine during pregnancy, childbirth and in postpartum care has grown significantly worldwide and is remarkably well-known in different regions of India. Traditional plant medicine has the potential for treating various diseases/ailments and is evidenced by well-known pharmacopeia of India - Ayurveda. This paper reviews the research papers on plant medicine utilization during pregnancy, childbirth and for postpartum care based on information published from India. Total 206 uses of 146 medicinal plants belong to 69 families, of which 125 are herbs, 39 trees, 26 shrubs and 16 climbers. Plant parts used as medicine for treating various disorders during pregnancy, childbirth and postpartum are 75 leaves, 48 roots, 23 seeds, 19 whole plants, 15 fruits, 11 barks, stem and flower 5 each, gum 2, latex 1, while in 24 cases part used is not specified. The use of plants for treating various disorder/ailments during pregnancy, of these most prevalent use is as a tonic (23 uses) which followed by vomiting (10), abdominal pain (9), to facilitate delivery (6) and so on. Use of plants during childbirth, maximum number of plants used to facilitate deliver (32 uses), for labor pain (15), and to induce labor (12). While use of plants for postpartum care, includes (37 uses) for lactation, (10) for haemorrhage, and 7 for abdominal pain.

Keywords: Medicinal plants, Pregnancy, Childbirth, Postpartum, India

INTRODUCTION

Use of medicinal plants for health care is centuries old tradition all over the world. In India, since ancient times plant medicine is practiced for treating various diseases/ailments. Indian subcontinent is rich in biodiversity as well as in indigenous traditional knowledge system. There are over 45,000 species of vascular plants occur in India. Of these, the folk medicine system of India reports the use of about 5,000 species with about 25,000 formulations for treating various ailments, whereas the tribal medicine includes the use of over 8,000 plant species with about 1,75,000 specific preparations or applications.¹

Humans have developed this vast reservoir of knowledge about plant medicine by trial and error method. Herbal medicine has remedy for almost all diseases or disorders. But considering the childbirth, it is one of the greatest occasions in the life of a woman. During pregnancy, childbirth and postpartum period women undergoes different health risks which may lead to substantial mortalities, especially in remote and distant regions of developing countries. Major factors which are responsible to death are postpartum hemorrhage, anemia and infections. To avoid such situations most of the people, rely on traditional medicinal plants or formulations. Traditionally people have a precious knowledge of herbs which are related to childbirth, pregnancy and postnatal period.² Generally medicinal plants are used to treat anemia, as a tonic, to facilitate delivery, to reduce

postpartum hemorrhage, reduce pain during childbirth, restore stamina and to heal the wounds. Using plants to ensure a healthy pregnancy and encourage labor is a common practice all over the world.³ Several users believe herbal medicines are of natural in origin and therefore are safer alternatives to modern medicines. Several studies conducted all over the world evidenced that medicinal plants have a significant role during pregnancy, childbirth and postpartum care. Some of remarkable works are, Kam reviewed on use of herbals for pregnancy, childbirth and postpartum, Hajj et al and Mudonhi et al have published a systematic review articles on these issues.⁴⁻⁶

Ahmed et al have conducted cross sectional study by interviewing 1117 women admitted to tertiary teaching hospital in Jimma, Ethiopia and found almost one-third of women use of medicinal plants during pregnancy.⁷ Xiong et al has done a cohort study on top 100 Chinese herbal medicine formulations used to identify their safety profiles and found 131,235 women used herbal formulations.⁸ Akunne et al interviewed 300 women in Eastern Nigeria and found about 97% women had knowledge of herbal medicine.⁹ Ali-Shtayeh et al interviewed 372 women at Palestine, of these 72.3% reported using herbs at different pregnancy stages and for infant healthcare.¹⁰ Moreira conducted study on medicinal plants in pregnancy and lactation in Brazil.¹¹ Randrianarivony studied use of medicinal plants for treating pregnancy, child delivery and for post-partum care by people living around Analavelona forest in South west Madagascar.¹² While Silalahi et al has done similar study on Minangkabau people, Indonesia.¹³ As far as India is concerned, procedures relating to pregnancy, childbirth, postpartum and child care have been rooted in cultural beliefs and traditions that are based on knowledge covered in ancient Indian texts.¹⁴ Several investigations have been conducted in different regions of India to explore its vast ethnomedicinal plant knowledge for treating various diseases/ailments.¹⁵⁻²⁰

Present study aims to evaluate the prevalence of herbs by women during pregnancy, childbirth, and postpartum. Keeping this in view, the study was initiated with an objective to compile the medicinal plant resources at one place. A synoptic account of plant species, family, Sanskrit and Hindi name wherever available, (method of preparation of medicine, doses and mode of administration is considered as given in publications), parts used, ailments and application cure these disorders. Total 206 uses of 146 medicinal plants which belong to 69 families have been provided in the paper.

METHODS

Inclusion criteria

Studies included the published literature sources that include treating pregnancy, childbirth and postpartum. 33

research papers which include studies conducted in different regions of India have been considered for present study on the basis of titles and abstracts indicating the words medicinal plants used during prenatal, postnatal, childbirth, pregnancy and/or postpartum.

Exclusion criteria

The study excluded all published literature sources that addressed general gynecological purposes and disorders other than, childbirth, pregnancy and/or postpartum. Also excluded the articles written under the title India but included the literature from other countries and the articles based on the food recipes prepared by using multiple plants for women health care.

Study selection

Following three stages and disorders under them have been considered for present study.

During pregnancy

Prevent miscarriage, vomiting, tonic, flatulence, uterine disorders, vaginal infections, hemorrhage, breathlessness, back pain, abdominal pain, anemia and other pregnancy related disorders.

During child birth

Flatulence, vomiting, to facilitate delivery, preeclampsia, removal of placenta, induce labor, hemorrhage, and abdominal pain.

Postpartum health care

Hemorrhage, lactation, tonic, postpartum recovery, uterus cleaning, restoration of health, fever, and abdominal pain.

RESULTS

Medicinal plants enumerated under following three categories with botanical name and family in parenthesis, local name Sanskrit and Hindi (in parenthesis), habit, part/s used, method of preparation of medicine, and mode of administration (Table 1).

Includes information on medicinal plants used for complications which are common during pregnancy (Table 2). Includes plant uses on complications and disorders related to childbirth (Table 3).

Gives the information on medicinal plants used for postpartum care. The information provided in this review is based on the published research paper covering the studies from different region of India.

Table 1: Medicinal plants used during pregnancy.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
1	<i>Abutilon indicum</i> (L.) Sweet (Malvaceae)	Atibala (Kanghi)	Shrub	Rt	-	Tonic	52
2	<i>Aegle marmelos</i> (L.) Corr. ex Roxb. (Rutaceae)	Bilva (Bel)	Tree	Rt	Decoction prepared in 200 ml water with about 25 gm roots is taken twice a day	Vomiting	46
3	<i>Aerva lanata</i> Juss. ex Schult. (Amaranthaceae)	Astmabayota (Chaya)	Herb	Wp	Decoction with cow's milk is boiled, taken twice a day from 7 th month of pregnancy	To facilitate deliver	30
4	<i>Aesculus indica</i> (Wall. ex Cambess.) Hook. (Sapindaceae)	(Pangar)	Tree	Fr	Fruits cooked and eaten	Tonic	29
5	<i>Ajuga bracteosa</i> Wall. ex Benth. (Lamiaceae)	Nilkanthi	Herb	Wp	Whole plant infusion is given	Vomiting	29
6	<i>Ananas comosus</i> (L.) Merr. (Bromaliaceae)	(Ananas)	Herb	Fr	The fruit as unripe and sour in taste it is directly used as uterine tonic	Tonic	37
7	<i>Arctium lappa</i> L. (Asteraceae)	-	Herb	Px	-	Tonic	36
8	<i>Avena sativa</i> L. (Poaceae)	(Javi)	Herb	Px	-	Tonic	36
9	<i>Bacopa monnieri</i> (L.) Penn., (Scrophulariaceae)	Nirabrahmi (Brahmi)	Herb	Wp	Juice is given orally 3 teaspoonful twice a day to pregnant ladies	Abdominal pain	30
10	<i>Benincasa hispida</i> (Thunb.) Cogn., (Cucurbitaceae)	Kooshmanda (Petha)	Climb-er	Wp	Fresh fruit juice (15 ml) is taken twice a day	Flatulence	30
11	<i>Berberis lycium</i> Royle. (Berberidaceae)	Daruharidra (Kasmal)	Shrub	Bk	Bark decoction is given	Tonic	29
12	<i>Chenopodium album</i> L. (Chenopodiaceae)	(Bethu sag)	Herb	Lf	Decoction is given	Tonic	29
13	<i>Cissampelos pareira</i> var. <i>hirsuta</i> (Buch-Ham. ex DC.) Forman (Menispermaceae),	Ambashtha (Akanadi)	Shrub s	Lf	About 100 gm leaf paste cooked with 50 gm rice flour and palm sugar is consumed 2-3 times daily	Back pain	46
14	<i>Citrus medica</i> L. (Rutaceae)	(Baranimbu)	Tree	Fr	25 ml juice, sugar and water are taken 3-4 times daily	Vomiting	46
15	<i>Costus speciosus</i> (Koeng) Sm. (Costaceae)	Kebuka (Keu)	Herb	Rh	-	Tonic	42
16	<i>Cuminum cyminum</i> L. (Apiaceae)	Jiraka (Jira)	Herb	Fr	The fruit are acrid used	Tonic	37
17	<i>Dactylorhiza hatagirea</i> (D. Don) Soó (Orchidaceae)	Hatta hadad	Herb	Tu	-	Tonic	48
18	<i>Diospyros melanoxylon</i> Roxb. (Ebenaceae)	Dirghapatrika	Tree	Bk	Juice	Anemia	39
19	<i>Emblica officinalis</i> Gaertn. (Euphorbiaceae)	Adiphala (Amla)	Tree	Fr	-	Anemia	52
20	<i>Evolvulus ulsinoides</i> L. (Convolvulaceae)	Vishnugandhi (Shyama-kranta)	Herb	Fl	About 10-15 gm of flowers grinded with honey and prepared as pills, given for 3- 5 days	Hemorrhage	21
21	<i>Ficus hispida</i> L.f. (Moreaceae)	Kakadumbura (Daduri)	Tree	Fr	Boiled green fruits are given for 21 days before delivery	Abdominal pain	40
22	<i>Fragaria vesca</i> L. (Rosaceae)	-	Herb	Px	-	Tonic	36

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
23	<i>Fumaria indica</i> (Hausskn.) Pugsley (Papaveraceae)	Araka (Pitpapra)	Herb	Lf	Leaf decoction is given	Vomiting	29
24	<i>Heliotropium indicum</i> L. (Boraginaceae)	Bhurundi (Hattajuri)	Herb	Rt	Decoction of root(10 ml) with honey is taken	Anemia	27, 28
25	<i>Malva parviflora</i> L. (Malvaceae)	Panirak (Sonchal)	Herb	Lf	Leaf decoction is given	Tonic	29
26	<i>Meconopsis aculeata</i> Royle (Papaveraceae)	(Gudi)	Herb	Wp	Whole plant powder is given	Tonic	29
27	<i>Mellisa officinalis</i> L. (Lamiaceae)	(Bililotan)	Herb	Px	-	Tonic	36
28	<i>Mentha arvensis</i> L. (Lamiaceae)	(Pudina)	Herb	Lf	Leaf infusion is given	Vomiting	29
29	<i>Mitchella repens</i> L. (Rubiaceae)	-	Herb	Px	-	Tonic	36
30	<i>Mullugo pentaphylla</i> L. (Aizoaceae)	(Pitagohan)	Herb	Wp	Whole plant decoction (75 gm) with water (50 ml) is given 3 teaspoons thrice a day for 7 days	To facilitate delivery	30
31	<i>Nepeta cataria</i> L. (Lamiaceae)	-	Herb	Lf	Leaves are cooked and eaten	Vomiting	29
32	<i>Ocimum gratissimum</i> L. (Lamiaceae)	Vridhdhutulsi (Bantulsi)	Herb	Lf	Decoction with leaves of mint (<i>Mentha arvensis</i> DC.) and 2 teaspoons of <i>ajwain</i> is given	Abdominal pain	50
33	<i>Oxalis corniculata</i> L. (Oxalidaceae)	Amlika (Amrulsak)	Herb	Lf	Leaves are chewed	Vomiting	29
34	<i>Papaver somniferum</i> L. (Papaveraceae)	-	Herb	Sd	Seed powder is given	Tonic	29
35	<i>Plumbago zeylanica</i> L. (Plumbaginaceae)	Chitraka (Chitrak)	Herb	Rt	Infusion	Abdominal pain	39
36	<i>Prunus persica</i> (L.) Batsch (Rosaceae)	(Shaftalu)	Tree	Lf	Leaf infusion is given	Vomiting	29
37	<i>Rubia cordifolia</i> L. (Rubiaceae)	Manjistha (Manjith)	Climb-er	Wp	Prepared as decoction and added 100 gm Jaggery, taken during pregnancy period	Anemia	21
38	<i>Rubus idaeus</i> L. (Rosaceae)	(Hindalu)	Shrub	Px	-	Tonic	36
39	<i>Rubus niveus</i> Thunb. (Rosaceae)	(Kalahinsalu)	Shrub	Lf	Leaf infusion is given	Prevent miscarriage	29
40	<i>Schleichera oleosa</i> (Lour.) Oken (Sapindaceae)	(Kusum)	Tree	Bk	Pregnant women bathe in water boiled with the bark of the stem	Abdominal pain	26
41	<i>Sida alnifolia</i> L. (Malvaceae)	(Bhiunli)	Shrub	Wp	Fresh whole plant paste in milk is taken (after 7 months of pregnancy) given daily before bed time	To facilitate delivery	30
42	<i>Smilax china</i> L. (Smilacaceae)	(Chobchini)	Shrub	Rt	-	Tonic	48
43	<i>Solanum indicum</i> L. (Solanaceae)	Virihati (Barhanta)	Shrub	Fr	Fruit paste is taken orally	Hemorrhage	24
44	<i>Swertia petiolata</i> D. Don (Gentianaceae)	(Pahadikireta)	Herb	Lf	Leaf juice is given	Vomiting	29
45	<i>Symplocos racemosa</i> Roxb. (Symplocaceae)	Lodhra (Lodh)	Tree	Bk	-	Tonic	48

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
46	<i>Taraxacum officinale</i> Weber ex Wigg (Asteraceae)	(Dulal)	Herb	Px	-	Tonic	36
47	<i>Taraxacum officinale</i> Weber ex Wigg (Asteraceae)	(Dulal)	Herb	Lf	Leaves cooked and eaten	Tonic	29
48	<i>Thottea siliquosa</i> (Lam.) Ding Hou. (Aristolochiaceae)	-	Shrub	Rt	The fresh roots are added to fresh toddy and kept for overnight. Small amount of the <i>toddy</i> is given	Tonic	26
49	<i>Thottea siliquosa</i> (Lam.) Ding Hou. (Aristolochiaceae)	-	Shrub	Rt	Root paste is applied over the during pregnancy	Abdominal pain	21
50	<i>Trigonella foenum-graecum</i> L. (Fabaceae)	Methika (Methi)	Herb	Sd	2 teaspoon seeds boiled in a glass of milk are given at bed time	Back pain	50
51	<i>Ulms villosa</i> Brandis (Ulmaceae)	(Bhamri)	Tree	Px	-	Tonic	36
52	<i>Urtica dioica</i> L. (Urticaceae)	(Bichubuti)	Herb	Px	-	Tonic	36
53	<i>Verbena officinalis</i> L. (Verbanaceae)	(Karaita)	Herb	Wp	Whole plant decoction is given	Prevent miscarriage	29
54	<i>Viburnum opulus</i> L. (Caprifoliaceae)	(Eri)	Shrub	Px	-	Prevent miscarriage	36
55	<i>Viola odorata</i> L. (Violaceae)	Nilapushpa (Banafshah)	Herb	Fl	Flower decoction is given	Breathlessness	29
56	<i>Vitis vinifera</i> L. (Vitaceae)	Draksha (Angur)	Climber	Lf	Leaf decoction is given	Prevent miscarriage	29
57	<i>Wedelia chinensis</i> Merr. (Asteraceae)	Bhringaraja (Bhanra)	Herb	Wp	5 ml decoction mixed with water given to women for continuous 21 days in empty stomach to treat uterine hemorrhage	Hemorrhage	24
58	<i>Zingiber officinale</i> Rosc. (Zingiberaceae)	Aardraka (Adrak)	Herb	Px	-	Tonic	36
59	<i>Zingiber officinale</i> Rosc. (Zingiberaceae)	Aardraka (Adrak)	Herb	Rh	Juice	Vomiting	39
60	<i>Zingiber officinale</i> Rosc. (Zingiberaceae)	Aardraka (Adrak)	Herb	Rh	Along with ghee and sugar is given daily	Back pain	50
61	<i>Ziziphus mauritiana</i> Lam. (Rhamnaceae)	Ajapriya (Ber)	Tree	Stbk	Paste of stem bark mixed with water is given twice a day after food for 15 days	Abdominal pain	27, 28, 40
62	<i>Ziziphus oenoplia</i> (L.) Mill. (Rhamnaceae)	Srigalakoli (Makai)	Shrub	Bk	Paste of bark (2.5 ml) mixed with honey after supper for two week	Abdominal pain	21

Table 2: Medicinal plants used during childbirth.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
1	<i>Abrus precatorius</i> L. (Fabaceae)	Gunja (Gunchi)	Climber	Sd	3 boiled seeds are ground and mixed with jiggery, given with hot water	Abdominal pain	31

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
2	<i>Abrus pulchellus</i> , Wall. (Fabaceae)	Gunja (Gunchi)	Climber	Sd	Paste with glass of milk given this preparation at bed time	To facilitate delivery	34
3	<i>Acacia catechu</i> Willd (Mimosaceae)	Khadira (Khair)	Tree	Bk	-	To facilitate delivery	25
4	<i>Acacia pennata</i> , Willd. (Mimosaceae)	(Aila)	Climber	Lf	Leaves decoction is drink orally	Labor pain	34
5	<i>Achyranthes aspera</i> L. (Amaranthaceae)	Chirchitaa (Latjira)	Herb	Rt	Infusion	Labor pain	39
6	<i>Achyranthes aspera</i> L. (Amaranthaceae)	Chirchitaa (Latjira)	Herb	Rt	Powder Mixed with water, then taken before delivery.	To facilitate delivery	23, 29, 37, 38, 42
7	<i>Achyranthus aspera</i> L. (Amaranthaceae)	Chirchitaa (Latjira)	Herb	Rt	The fresh root is tied around the thumb of right leg	To facilitate delivery	33, 35
8	<i>Aerva lanata</i> Juss. ex Shults. (Amaranthaceae)	Astamabayot a (Chalya)	Herb	Wp	-	To facilitate delivery	52
9	<i>Albizia julibrissin</i> , Durazz. (Mimosaceae)		Tree	Fr	Along with <i>Ficus glomerata</i> Roxb; <i>Terminalia arjuna</i> (Roxb)Wt.Ar.; <i>Ficus auriculata</i> , different plant parts powder is mixed with honey to taken for one week	To facilitate delivery	34
10	<i>Aloe vera</i> (L.) Burm.f. (Liliaceae)	Grihkanyaa (Gheekanwar)	Herb	Lf	Leaf pulp eaten before 2 days before delivery	To facilitate delivery	21
11	<i>Aloe vera</i> L. (Liliaceae)	Grihkanyaa (Gheekanwar)	Herb	Lf	Juice of leaves is given	Labor pain	33, 35
12	<i>Amaranthus caudatus</i> L. (Amaranthaceae)	(Ram dana)	Herb	Sd	Seeds are cooked and eaten	Labor pain	29
13	<i>Amaranthus viridis</i> L. (Amaranthaceae)	Tanduliya (Vishghna)	Herb	Sd	Seeds are cooked and eaten	Labor pain	29
14	<i>Argyrea nervosa</i> (Burm. f.) Boj. (Convolvulaceae)	Samudrapalaka (Samndarkapat)	Climber	Lf	Leaves are placed on the earlobes of women	Placenta removal	28
15	<i>Aristolochia bracteolata</i> Retz. (Aristolochiaceae)	Dhumrapatra (Kiramar)	Herb	Lf	-	To facilitate delivery	53
16	<i>Artemisia absinthium</i> L (Asteraceae)	Indhana (Vilayati afsanthin)	Herb	Wp	Whole plant infusion is given	Labor pain	29
17	<i>Asparagus recemosus</i> Willd. (Liliaceae)	Shatmuli (Shatawar)	Herb	Lf	Leaf juice (two teaspoon a day) is given	To facilitate delivery	33, 39
18	<i>Bidens pilosa</i> L. (Asteraceae)	(Samara)	Herb	Lf	Leaf decoction is given	Induce labor	29
19	<i>Boerhaavia diffusa</i> (L.f.) Willams. (Nyctaginaceae)	Punarnawa (Sant)	Herb	Root	Paste (2 spoonful's) mixed with water given for 7 days early in the morning	To facilitate delivery	40
20	<i>Boerhaavia diffusa</i> L. (Nyctagenaceae),	Punarnawa (Sant)	Herb	Lf	About 20 ml of leaf juice is given after delivery	Hemorrhage	35
21	<i>Boerhavia diffusa</i> . L (Nyctaginaceae)	Punarnawa (Sant)	Herb	Rt	Fresh root grinds to paste, then eaten	To facilitate delivery	23
22	<i>Bombax ceiba</i> L. (Bombacaceae)	Salmali (Semul)	Tree	Rtbk	-	Hemorrhage	32

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
23	<i>Bombax ceiba</i> L. (Bombacaceae)	Salmali (Semul)	Tree	Stbk	-	To facilitate delivery	43
24	<i>Butea monosperma</i> (Lam.) Taub. (Fabaceae)	Palasha (Palas)	Tree	Bk, Gum	Infusion	To facilitate delivery	39
25	<i>Calotropis gigantea</i> (L.) R. Br. ex Ait. (Apocynaceae)	Arka (Aak)	Shrub	Latex	Latex mixed with coconut oil, then applied topically	Induce Labor	23, 40
26	<i>Canabis sativa</i> L. (Cannabaceae)	Bhanga (Bhang)	Herb	Lf	Leaf infusion is given	Labor pain	21, 29
27	<i>Cardiospermum alicacabum</i> L. (Sapindaceae)	Karnasphota (Kanphuti)	Climb-er	Lf	Dried bark is boiled in water until extract decoction well, then taken	Abdominal pain	23
28	<i>Cassia tora</i> L. (Caesalpiniaceae),	Dadamari (Chakunda)	Herb	Wp	Young seedling of the plants after washing is chewed by pregnant women	To facilitate delivery	33, 35
29	<i>Chenopodium botrys</i> L. (Chenopodiaceae)	(Bethu sag)	Herb	Wp	Whole plant decoction is given	Labor pain	29
30	<i>Citrullus colocynthis</i> Schrad. (Cucurbitaceae)	Mahendrava-runi (Indrayan)	Climb-er	Fr	Cotton dipped in fruit juice is placed over the mouth of the uterus	To facilitate delivery	31
31	<i>Citrullus colocynthis</i> Schrad. (Cucurbitaceae)	Mahendrava-runi (Indrayan)	Climb-er	Rt	Paste made with cow milk is applied on lower abdomen	To facilitate delivery	43
32	<i>Clinopodium umbrosum</i> (M. Bieb.) Kuntze (Lamiaceae)	-	Herb	Wp	Infusion of tender shoots is given	To facilitate delivery	29
33	<i>Clitoria ternatea</i> L. (Fabaceae)	Aparajitaa (Aparajita)	Herb	Rt	-	To facilitate delivery	39
34	<i>Clitoria ternatea</i> L. (Fabaceae)	Aparajitaa (Aparajita)	Herb	Fl	-	Hemorrhage	37
35	<i>Cyathula prostrata</i> Blume. (Amaranthaceae)	-	Herb	Wp	Prepared as paste and applied over the abdomen to facilitate deliver	To facilitate delivery	21
36	<i>Cydonia oblonga</i> Mill. (Rosaceae)	Amriphala (Bihi)	Tree	Sd	Seed infusion is given	Induce labor	29
37	<i>Dactylorhiza hatagirea</i> (D. Don) Soo (Orchidaceae)	hatta hadd	Herb	Tu	Tuber powder is given	Induce labor	29
38	<i>Dillenia pentagyna</i> Roxb. (Dilleniaceae)	(Aggai)	Tree	Gum	Gum dissolved in water is given	To facilitate delivery	27, 28, 40
39	<i>Elettaria cardamomum</i> Maton (Zingiberaceae)	Upakunchi-ka (Chotiela-ichi)	Herb	Fr	Along with <i>Sesamum indicum</i> seeds, desi ghee in milk is given when labor pain starts	Labor pain	47
40	<i>Eleusine indica</i> (L.) Gaertn. (Poaceae)	(Mandla)	Herb	Lf	Leaf juice is given	To facilitate delivery	29
41	<i>Geranium wallichianum</i> D. Don.ex Sweet (Geraniaceae)	(Laljhari)	Herb	Rt	Root decoction is given	Labor pain	29
42	<i>Gloriosa superba</i> L. (Liliaceae)	Langli (Karihari)	Climb-er	Rh	-	To facilitate delivery	53
43	<i>Gloriosa superba</i> L. (Liliaceae)	Langli (Karihari)	Herb	Rt	Fresh root paste is applied on the supra pubic region and the vagina	Induce labor	30

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
44	<i>Glycyrrhiza glabra</i> L. (Fabaceae)	Madhuka (Mulethi)	Herb	Sd	Seed paste	Labor pain	29
45	<i>Lepidium sativum</i> Wall. (Brassicaceae)	Chandrashura (Halim)	Herb	Sd	Seed decoction is given	Labor pain	29
46	<i>Linum usitatissimum</i> L. (Linaceae)	Atasi (Alsi)	Herb	Sd	Seed powder is given	To facilitate delivery	29
47	<i>Malus domestica</i> Borkh. (Rosaceae)	(Banmahal)	Tree	Fr	Fruits are eaten	To facilitate delivery	29
48	<i>Mentha piperita</i> L. (Lamiaceae)	(Pudina)	Herb	Lf	Leaf infusion is given	Induce labor	29
49	<i>Moringa oleifera</i> Lam. (Moringaceae)	Shobhanjana (Munga)	Tree	Rt, Lf	Fresh roots (50 gm) are ground and the paste is mixed in water and taken single dose just after delivery	Placenta removal	30
50	<i>Nasturtium officinale</i> R.Br. (Brassicaceae)	(Piriyahalim)	Herb	Lf	Leaf decoction is given	To facilitate delivery	29
51	<i>Ocimum basilicum</i> L. (Lamiaceae)	Munjariki (Babui tulsi)	Herb	Lf	Leaf infusion is given	Labor pain	29
52	<i>Physalis alkekengi</i> L. (Solanaceae)	(Tulatipati)	Herb	Sd	Seed powder is given	Induce labor	29
53	<i>Pimpinella anisum</i> L. (Apiaceae)	Shetaqpushpa (Saunf)	Herb	Px	-	Vomiting, flatulence	36
54	<i>Plantago lanceolata</i> L. (Plantaginaceae)	(Baltanga)	Herb	Lf	Leaves cooked & eaten	To facilitate delivery	29
55	<i>Podophyllum hexandrum</i> Royle (Berberidaceae)	(Bakrachimaka)	Herb	Wp	Whole plant decoction is given	Placenta removal	29
56	<i>Polypleurum stylosum</i> (Wt.) Hall. (Podostemaceae)	-	Herb	Wp	Fresh plant paste is applied externally around the vagina and belly	To facilitate delivery and pain killer	26
57	<i>Punica granatum</i> L. (Lythraceae)	Dadima (Anar)	Tree	Sd	Along with <i>Glycyrrhiza glabra</i> L. root with a little honey and ghee are taken	To facilitate delivery	46
58	<i>Rauvolfia serpentina</i> Bth. ex. Kurtz (Apocynaceae)	Sarpgandha (chandrabhaga)	Herb	Rt	Decoction (1 tea spoonful) mixed with cow milk applied for 7-10 days continuously once a day	Induce labor	40
59	<i>Rauvolfia serpentina</i> Bth. ex. Kurtz (Apocynaceae)	Sarpgandha (chandrabhaga)	Herb	Rt	It is used as uterine contraction and promotes the expulsion of the fetus	To facilitate delivery	37
60	<i>Rubia cordifolia</i> L. (Rubiaceae)	Manjistha (Manjith)	Climber	Rt	Paste is prepared and massage it over the abdomen from top to bottom to facilitate delivery	To facilitate delivery	21, 41
61	<i>Rumex nepalensis</i> Spreng. (Polygonaceae)	(Kulii)	Herb	Lf	Leaves cooked and eaten	Labor pain	29
62	<i>Sida acuta</i> Burm. f. (Malvaceae)	Bala (Bariara)	Herb	Rt	Paste	To facilitate delivery	39
63	<i>Sisymbrium irio</i> L. (Brassicaceae)	-	Herb	Sd	Seed decoction is given	Induce labor	29
64	<i>Tagetes minuta</i> L. (Asteraceae)	Ganduga (Genda)	Herb	Lf	Leaf juice is given	Induce labor	29
65	<i>Trachyspermum ammi</i> (L.) Sprague. (Apiaceae)	Ajmoda (Ajwain)	Herb	Sd	With rhizome of <i>Zingiber officinale</i> and <i>Amomum subulatum</i> fruits crushed in	Labor pain	47

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
					water, boiled and sugar added and is given when labor pain starts		
66	<i>Trapa natans</i> L. (Trapaceae)	Shringata (Singhara)	Herb	Fr	Fruits cooked and eaten	Induce labor	29
67	<i>Urtica dioica</i> L. (Utricaceae)	(Bicchubuti)	Herb	Lf	Leaves cooked and eaten	Induce labor	29
68	<i>Veratrum nigrum</i> L. (Melanthiaceae)	-	Herb	Rt	-	Preeclampsia	52
69	<i>Viburnum prunifolium</i> L. (Capprifoliaceae)	(Eri)	Shrub	Px	-	To facilitate delivery	36

Table 3: Medicinal plants used postpartum care.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
1	<i>Achyranthes aspera</i> L. (Amaranthaceae)	Chirchitaa (Latjira)	Herb	Rt, Lf	2-3 ml of decoction of fresh leaves is given twice a day	Hemorrhage	40, 53
2	<i>Achyranthes aspera</i> L. (Amaranthaceae)	Chirchitaa (Latjira)	Herb	Wp	Whole plant is crushed, boiled in coconut oil and given one teaspoon 3 times daily for 5 days	Uterus cleaning	30
3	<i>Achyranthes aspera</i> L. (Amaranthaceae)	Chirchitaa (Latjira)	Herb	Rt	Paste is applied on belly	Abdominal pain	43
4	<i>Adathoda vasica</i> . Nees. (Acanthaceae)	Vaasaka (Arusha)	Shrub	Rt, Lf	Dried leaves boiled with water, filtered & decoction and given	Hemorrhage	23, 42
5	<i>Adhatoda vasica</i> Nees. (Acanthaceae)	Vaasaka (Arusha)	Shrub	Lf	Half glass fresh leaf extract mixed in boiled water is given daily after delivery	Body pain	30
6	<i>Ailanthus excels</i> Roxb. (Simaroubaceae)	Madala (Maharuk)	Tree	Bk	-	Postnatal care	53
7	<i>Aloe barbadensis</i> Mill. (Liliaceae)	Grihkanyaa (Ghee kanwar)	Herb	Lf	10 ml leaf juice mixed in water given to women empty stomach for 10 days	Tonic	40
8	<i>Aloe vera</i> (L.) Burm.f. (Liliaceae)	Grihkanyaa (Ghee kanwar)	Herb	Lf	Taken fresh juice	Hemorrhage	23
9	<i>Aloe vera</i> (L.) Burm.f. (Liliaceae)	Grihkanyaa (Ghee kanwar)	Herb	Lf	Pulp and turmeric paste is applied on breasts	Swelling of nipple	43
10	<i>Anethum graveolens</i> L. (Apiaceae)	Satapushpi (Sowa)	Herb	Sd	Seed extract given	Hemorrhage	22
11	<i>Anogeissus latifolia</i> Wall. ex Bedd. (Combretaceae)	Dhawa	Tree	Px	Preparation including butter, dry fruits and jaggery, given in the form of dessert	Back pain	49
12	<i>Aphanamixis polystachya</i> (Wall.) Parker (Meliaceae)	Rohituka (Harinharra)	Tree	Bk	-	Abdominal pain	53
13	<i>Argemone mexicana</i> L. (Papaveraceae)	Katuparni (Bharband)	Herb	Wp	Paste or juice	Hemorrhage	39
14	<i>Asparagus recemosus</i> Willd. (Liliaceae)	Shatmul (Shatawar)	Herb	Tu	Crushed and 5-10 ml of juice is given twice for 3 weeks after delivery	Lactation	21,23, 25,30, 32,33, 35,37,

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
							38,41-43,46,48, 52
15	<i>Avena sativa</i> L. (Poaceae)	Yavikaa (Javi)	Herb	Px	-	Lactation	36
16	<i>Butea monosperma</i> (Lam.) Taub. (Fabaceae)	Palasha (Palas)	Tree	Fl	Used to prevent excess bleeding	Hemorrhage	21
17	<i>Butea monosperma</i> (Lam.) Taub. (Fabaceae)	Palasha (Palas)	Tree	Fl, Bk	-	Hemorrhage	25
18	<i>Caesalpinia bonduc</i> Roxb. (Caesalpinaceae)	Putikaranja (Karanju)	Shrub	Sd	Seed powder is given	Puerperal fever	43
19	<i>Cajanus cajan</i> (L.) Millsp (Fabaceae)	Aadhaki (Arhar)	Herb	Lf, Sd	Leaves and seed applied as a poultice over the breast	Lactation	37
20	<i>Capsicum frutescens</i> L. (Solanaceae)	Katuviraa (Lalmirch)	Herb	Fr	Fruit is mixed with dried coconut, prepared as 'chutney' and eaten with food	Cleaning uterus	21
21	<i>Cardiospermum alicacabum</i> L. (Sapindaceae)	Karnasphota (Kanphuti)	Climber	Sd	Infusion of seeds is used	Uterus cleaning	52
22	<i>Carica papaya</i> L. (Caricaceae)	Papita (Papeeta)	Tree	Unripe Fr	Tender fruit is cooked with rice or finger millet and eaten for a week	Lactation	21, 37
23	<i>Centella asiatica</i> (L.) Urban (Apiaceae)	Mandukaparni (Brahmi)	Herb	Lf	-	Tonic	53
24	<i>Clerodendrum infortunatum</i> L. (Verbanaceae)	Barhichuda (Bhant)	Shrub	Px	Juice is given	Hemorrhage	22
25	<i>Clerodendrum phlomidis</i> L.f. (Verbenaceae)	Agnimantha (Arni)	Shrub	Lf	Paste is applied	Lactation	43
26	<i>Clitoria ternatea</i> L. (Fabaceae)	Aparajitaa (Aparajita)	Herb	Fl	Flowers of the plant crushed and mixed with honey is taken 2 teaspoonful daily	Cleaning uterus	30
27	<i>Cnicus benedictus</i> L. (Asteraceae)	-	Herb	Px	-	Lactation	36
28	<i>Cocos nucifera</i> L. (Araceae)	Narikela (Nariyal)	Tree	Rt, Infl.	Squashed root and inflorescence (20 gm), boiled in 250 ml of water for 15 minutes is used	Abdominal pain, hemorrhage	30
29	<i>Convolvulus arvensis</i> L. (Convolvulaceae)	Bhadrabalaa (Beri)	Climber	Lf	Handful seed cotyledons juice with milk taken or fresh leaves grinds paste, taken	Lactation	23
30	<i>Costus speciosus</i> (Koeng) Sm. (Costaceae)	Kebuka (Keu)	Herb	Rt	One spoon of root powder is taken with cold water twice daily for 2-10 days	Tonic	38
31	<i>Costus speciosus</i> (Koen.) Sm. (Costaceae)	Kemuka (Keu)	Herb	Lf	-	Postnatal care	53
32	<i>Curculigo orchoides</i> Gaertn. (Amaryllidaceae)	Mushali (Kalimusali)	Herb	Tu	2- 5 ml of tuber juice is taken orally	Abdominal pain	21, 39
33	<i>Curculigo orchoides</i> Gaertn. (Amaryllidaceae)	Mushali (Kalimusali)	Herb	Rh	Fresh tuberous root paste mixed with one glass of cow's milk is taken orally	Abdominal pain	30
34	<i>Curcuma longa</i> L. (Zingiberaceae)	Haridra (Haldi)	Herb	Rh	Along with <i>Allium sativum</i> , <i>Ferula asafoetida</i> , <i>Zingiber</i>	Lactation	51

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
					<i>officinale</i> , <i>Trachyspermum ammi</i> , <i>Piper nigrum</i> , taken in equal quantity, roasted and crushed taken 1 gm per day		
35	<i>Cyclea arnotii</i> Miers. (Menispermaceae)	Paathaa	Herb	St	Handful of fresh leaves grinded with water & then taken orally	Lactati-on	23
36	<i>Daucus carota</i> L.(Apiaceae)	Shikhamula (Gajar)	Herb	Rt	Root juice to increase lactation	Lactati-on	37
37	<i>Daucus carota</i> L. (Apiaceae)	Shikhamula (Gajar)	Herb	Rt	-	Contrac-tion of uterus	42
38	<i>Dillenia aurea</i> Sm. (Dilleniaceae)	Bharija (Chalta)	Tree	Stbk	Extract of stem bark (10 ml) is taken once a day for 2 weeks in empty stomach	Restorati-on of health	27, 28
39	<i>Euphorbia heterophylla</i> L. (Euphorbiaceae)	(Dudhi)	Herb	Lf	Decoction of 75 gm of dried powder with water, mixed with cow's milk and taken	Lactati-on	23
40	<i>Euphorbia hirta</i> L. (Euphorbiaceae)	Dudhi (Dudhi)	Herb	Lf	Decoction of fresh leaves prepared with milk, taken orally twice daily for 2-4 days	Lactati-on	23,30, 38,42
41	<i>Ficus benghalensis</i> L. (Moraceae)	Bahupada (Bargad)	Tree	SD	Dried seeds grind to a fine powder then mixed with milk and drink	Lactati-on	23
42	<i>Ficus hispida</i> L. F. (Moraceae)	Kakadumbu-ra (Daduri)	Tree	Fr	Boiled green fruits given	Lactati-on	27, 28
43	<i>Foeniculum vulgare</i> Mill. (Apiaceae)	Madhurica (Saunf)	Herb	Px	-	Lactati-on	36
44	<i>Galega officinalis</i> L. (Fabaceae)	-	Herb	Px	-	Lactati-on	36
45	<i>Hemidesmus indicus</i> (L).R.Br (Periplocaceae)	Anantmula (Anantmul)	Shrub	Rt	Paste of fresh root is prepared and taken twice daily for 1-2 days	Lactati-on	21,23, 38,41, 46
46	<i>Ipomoea digitata</i> L. (Convolvulaceae)	Bhumikush manda (Bilalkand)	Climber	Tu	Juice of tuber along with milk is given	Lactati-on	41
47	<i>Lilium polyphyllum</i> D. Don. (Liliaceae)	Kakoli	Herb	Px	Along with <i>Ipomoea paniculata</i> R.Br given	Lactati-on	41
48	<i>Madhuca longifoila</i> (Koen.) Macbr. (Sapotaceae)	(Mahua)	Tree	Lf	Fresh leaves grinded to paste mixed with coconut oil, then apply topically in breast	Lactati-on	23
49	<i>Meliosma simplicifolia</i> (Roxb.) Walp. (Sabiaceae),	(Kanna)	Tree	Bk	Fresh tender bark is eaten after delivery	Contracti-on of uterus	26
50	<i>Mimosa pudica</i> L. (Mimosaceae)	Lajja (Lajwanti)	Herb	Lf	Leaves are collected and made into paste is given orally	Hemorr-hage	24
51	<i>Mimosa pudica</i> L. (Mimosaceae)	Lajja (Lajwanti)	Herb	Rt	Root paste (1 tea spoonful) mixed with honey given for 7 days early in the morning	Contracti-on of uterus	40
52	<i>Momordica charantia</i> L. (Cucurbitaceae)	Sushavi (Karela)	Climber	Lf	Fresh leaves paste & mixed in coconut oil, then apply	Lactation	23

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
					topically in the region of the breast		
53	<i>Moringa oleifera</i> Lam. (Moringaceae)	Shobhanjana (Munga)	Tree	Lf	Cooked with coconut oil to prepare a curry, eaten with rice to increase breast milk	Lactation	21
54	<i>Mullugo pentaphylla</i> L. (Aizoaceae)	Khetpapra (Jharasi)	Herb	Lf	Leaf decoction is given twice a day for cleaning the uterus after delivery	Uterus cleaning	30
55	<i>Mussaenda frondosa</i> L. (Rubiaceae)	Shrivati (Bedina)	Tree	Lf	Leaf extract given	Lactation	22, 26
56	<i>Ocimum sanctum</i> L. (Lamiaceae)	Ajaka (Ramtulas)	Herb	Lf	Juice is taken with jaggery and cow milk	Abdominal pain	43
57	<i>Papaver somniferum</i> L. (Papaveraceae)	Ahifena (Afim)	Tree	Sd	Powder (one spoon) and 4-5 dates in milk, boiled for 15 minutes, then add one spoon clarified butter in it and given	Tonic	44
58	<i>Physalis minima</i> L. (Solanaceae)	Tankaari (Tulati)	Herb	Lf	Hand amount of dried leaves, making a decoction with water, then taken orally	Lactation	23
59	<i>Phytolacca acinosa</i> Roxb. (Phytolaccaceae)	(Matazor)	Herb	Rt	Root paste mixed in oil and applied over nipple	Swelling of nipple	29
60	<i>Pimpinella anisum</i> L. (Apiaceae)	Shetpushpa (Saunf)	Herb	Px	-	Lactation	36
61	<i>Piper longum</i> L. (Piperaceae)	Pipali (Pipli)	Shrub	-	Reducing the abdominal fat after delivery	Reducing abdominal fats	41
62	<i>Plumbago zeylanica</i> L. (Plumbaginaceae)	Chitraka (Chitrak)	Herb	Tu	Juice of the tuber is used for the removal of placenta and the contraction of uterus after delivery	Placenta removal and uterus contraction	21
63	<i>Polygonum chinense</i> L. (Polygonaceae)	(Ameta)	Shrub	St	Stem is acidic and given orally to ladies after delivery	Contraction of uterus	26
64	<i>Pterocarpus marsupium</i> Roxb. (Fabaceae)	Pitasara (Bijasal)	Tree	Bk	-	Tonic	53
65	<i>Ricinus communis</i> L. (Euphorbiaceae)	Eranda (Erand)	Tree	Lf	Applied as poultice over the breast and taken in the form of juice	Lactation	37
66	<i>Rubus idaeus</i> L. (Rosaceae)	(Adher)	Shrub	Px	-	Lactation	36
67	<i>Silybum marianum</i> Gaertn. (Asteraceae)	-	Herb	Px	-	Lactation	36
68	<i>Tephrosia purpurea</i> (L.) Pers. (Fabaceae)	Shrpunkha (Dhamasia)	Shrub	Lf	Decoction of leaf (5 ml) mixed with honey (2 ml) given twice a day for one month	Postnatal complications	27, 40
69	<i>Terminalia arjuna</i> (Roxb) W. & A. (Combretaceae)	Arjuna (Arjuna)	Tree	Rt, Lf, Stbk,	Different plant parts powder is mixed with honey to taken for 1 week	Hemorrhage	24
70	<i>Thespesia lampas</i> (Cav.) Dalzell & Gibs. (Malvaceae)	Tundikera (Janglibhindi)	Shrub	Px	-	Lactation	41
71	<i>Trachyspermum ammi</i> (L.) Spr. (Apiaceae)	Ajmoda (Ajwain)	Herb	Sd	Powder	Lactation	44, 48

Continued.

S. no.	Botanical name and family	Local name (Sanskrit and Hindi)	Habit	Part used	Mode of preparation, administration, dose	Use	Ref no.
72	<i>Trachyspermum ammi</i> (L.) Sprague. (Apiaceae)	Ajmoda (Ajwain)	Herb	Rh	Along with <i>Trianthema portulacastrum</i> , <i>Anethum graveolens</i> , <i>Allium sativum</i> , <i>Curcuma longa</i> and <i>Piper nigrum</i> , powdered and added with vegetables. Then given with boiled rice meal for 40 days	Contraction of uterus	51
73	<i>Trachyspermum roxburghianum</i> (DC.) Craib. (Apiaceae)	Ajmud (Ajwain)	Herb	Sd	Powdered seeds mixed with honey is taken 2 teaspoonful 3 times daily	Abdominal pain	30
74	<i>Trigonella foenum-graecum</i> L. (Fabaceae)	Methika (Methi)	Herb	Sd	-	Lactation	36, 37, 45
75	<i>Withania somnifera</i> Dunal (Solanaceae)	Ashwagandha (Ashgandh)		Sd	About 25 gm seed powder mixed in 200 ml cow milk is taken	Lactation	46
76	<i>Zingiber officinale</i> Rosc. (Zingiberaceae)	Aardraka (Adrak)	Herb	Rh	Along with jiggery and desi ghee mixture is given in early morning for seven days	Lactation	44

DISCUSSION

Present paper covers the information of 206 plant species of 69 families, of which 125 are herbs, 39 trees, 26 shrubs and 16 climbers (Figure 1).

Plant parts used as medicine for treating various disorders during pregnancy, childbirth and postpartum are 75 leaves, 48 roots, 23 seeds, 19 whole plants, 15 fruits, 11 barks, stem and flower 5 each, gum 2, latex 1, while in 24 cases part not specified (Figure 2).

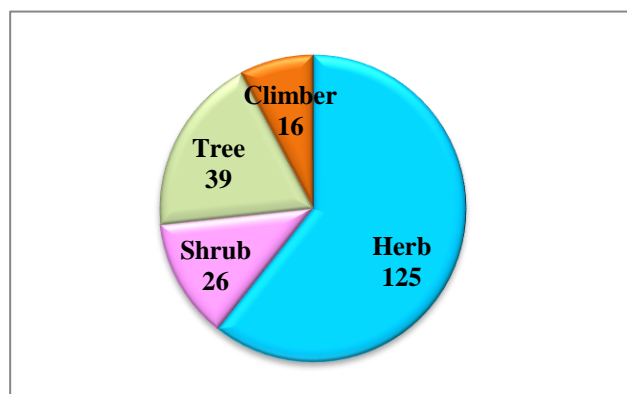


Figure 1: Habit wise no. of plant species used.

Figure 3 includes the use of plants for treating various disorder/ailments during pregnancy, of these most prevalent use is as a tonic (23 uses) which followed by vomiting (10), abdominal pain (9), to facilitate delivery (6), to prevent miscarriage and anaemia (4 each), haemorrhage and back pain (3 each) and flatulence and breathlessness (1 each).

In Figure 4, gives the details of use of plants during childbirth, maximum number of plants used to facilitate deliver (32 uses), for labor pain (15), to induce labor (12), abdominal pain (4), haemorrhage and placenta removal (3 each), flatulence; vomiting and preeclampsia (1 each).

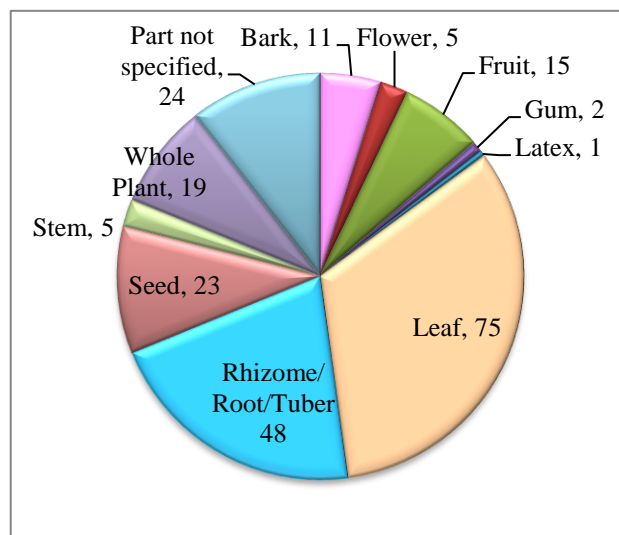


Figure 2: No. of plant parts used for treating various ailments.

Figure 5 shows use of plants for postpartum care, includes (37 uses) for lactation, (10) for haemorrhage, 7 for abdominal pain, tonic (5), contraction of uterus (4), uterus cleaning and postnatal care (3 each), cleaning uterus, back pain and nipple swelling (2 each), while restoration of health, fever and reducing abdominal fats (1 each).

Frequency of use of plants indicate most prevalent disorder/ailments during pregnancy are weakness or general health, nausea/vomiting, abdominal pain and to facilitate delivery. During childbirth common uses of plants are to facilitate delivery, labor pain and to induce labor. While more use of plants for postpartum care, includes disorders/ailments, for lactation, for haemorrhage and for abdominal pain. Besides this there are studies focused on the use of herbal medicine as an nutraceuticals by preparing different food recipes during pregnancy and after childbirth in the form of 'halurwa', and 'laddu', also medicated bath, oil massage is practiced.^{54,55}

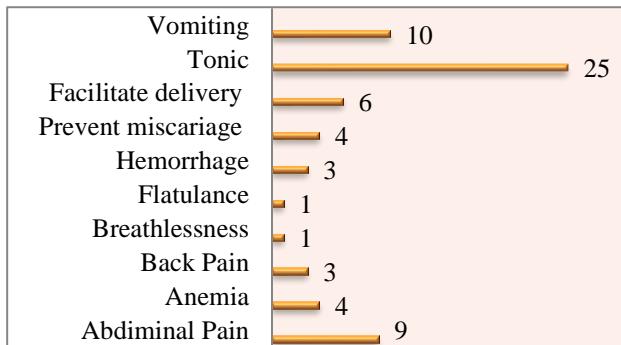


Figure 3: Medicinal plants used during pregnancy for various ailments.

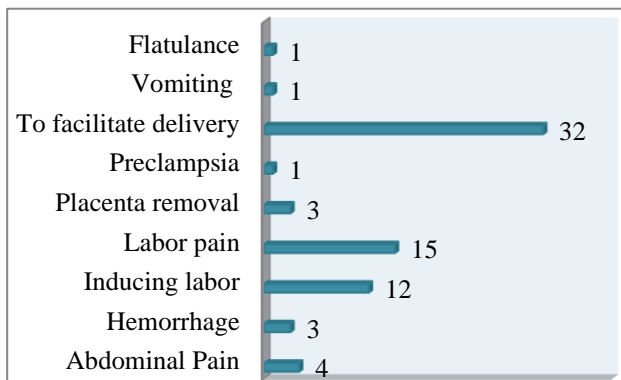


Figure 4: Medicinal plants used during pregnancy for various ailments.

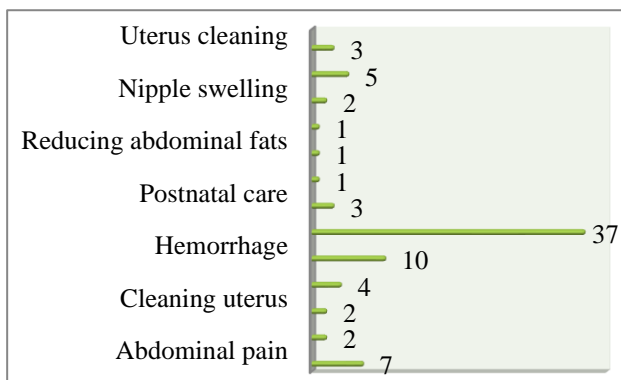


Figure 5: Medicinal plants used during postpartum care.

Present review indicates that the prevalence of use of plant medicine during pregnancy, childbirth and postpartum is common practice in different regions of India. Even though there are several misconceptions regarding safety and efficacy of plant medicines, evidences show there is increase in use of herbal medicine. This might be due to inadequate modern clinical facilities in several parts of developing countries and realization of fact and side effects of allopathic medicines.

CONCLUSION

Indigenous traditional knowledge about medicinal plants is passed on from one generation to other by the people practicing it. In India traditional knowledge was part of our society and hence deeply rooted in civilization till date. Finding of our study highlights the integrity of herbal medicine in Indian culture and how it is important. Several studies have already been conducted on many plants about its safety and efficacy but still there is a need to determine the chemical components and mode of action of plants which are not yet completely studied.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Sharma PP, Sharma SP. Medicinal plants used during pregnancy, childbirth and postpartum care in India – a systematic review. *Int J Res Med Sci* 2023;11:3803-18.