

Folkloric Management of Health Problems during Pregnancy: A Survey among Women in Kabul city, Afghanistan

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Abstract

Cultural and religious beliefs, the rich tradition of herbal medicine, and the existence of respected traditional practitioners and indigenous medicinal plants made great contributions to the health care of Afghanistan throughout history. Most of the people living in Afghanistan utilize folk medicine for the management of their prevailing health problems. However, studies regarding the use of this system of medicine especially, during pregnancy are lacking. Therefore, the current study was carried out to explore the utilization of folk medicine during pregnancy among women in Kabul city. The data were collected through face-to-face interviews with 390 pregnant women using a structured questionnaire. The prevalence of traditional and folk practices used in this study was found to be 34.6 percent. The common practices were; using herbal remedies, diet abstinence, wearing amulets, visiting *Mullah*, and changing the abnormal position of the fetus by massage. Pregnant women use a variety of folk remedies and practices to manage their minor

health problems. However, scientific evidence about the efficacy and safety of herbal remedies is limited. In addition, food abstinence which is very common among Afghan women during pregnancy may result in inadequate intake of various nutrients and is associated with adverse pregnancy outcomes. As folkloric medicine (FM) plays a significant role during pregnancy in Afghanistan, Therefore adequate studies are needed to evaluate their safety and efficacy of FM.

Keywords

Pregnancy, Folk medicine, Herbal remedies, Food abstinence.

1. INTRODUCTION

Before synthetic drugs and modern methods of therapy came into widespread use, traditional medicine (TM) and folk medicine (FM) played an important role in the management of different diseases among humans. According to the World

to Health Organization (WHO), “Herbal medicines (HMs) include herbs, herbal materials, herbal preparations, and finished herbal products, which contain as active ingredients parts of plants, or other plant materials, or combinations (World Health Organization, 2018).

The use of traditional herbal medicine is increasing worldwide, specifically in low-income countries. It is known that 80% of Asian and African populations use HMs as their primary form of health care system (Oyebode, Kandala, Chilton, & Lil, 2016).

Depending upon the geographical area and socio-cultural groups, the prevalence of TM use during pregnancy is quite different. For instance, in the Middle East (22-82.3 %), Western World (1-60%), Nigeria (67.5 %), Norway (36 %), Mumbai-India (46 %), Turkey (70 %), Iran (48.4 %), UK (57.8 %), and the USA (9.4 %) people are using TM as their health care system (Kennedy, Lupattelli, Koren, & Norde, 2016; Fakeye, Adisa, & Musa, 2009; Nordeng & Haven, 2005; Bhatt, Leong, Yadav, & Doshi, 2016; Okka, Durduran, & Degerli Kodaz, 2016; Sattari, 2012; Broussard, 2010).

The high prevalence of TM and FM use could be attributed to their accessibility, affordability, availability, and the acceptability of traditional medicine by the majority of the population in developing countries. (Bhatt, Leong, Yadav, & Doshi, 2016; Tamuno, Omole-Ohonsi, & Fadare, 2011). On the other hand, some researchers associated the use of HM among women with a low level of education, place of residence, and low income (Mothupi, 2014; Sattari, 2012; Bhatt, Leong, Yadav, & Doshi, 2016; Ondicho, Ochora, J, Matu, E, & Mutai, J, 2016). Kennedy et al. reported that in Europe, North America, and Australia 126 MPs were

used during pregnancy, out of which 27 were identified as harmful during pregnancy (Kennedy, Lupattelli, Koren, & Norde, 2016).

Women use herbal remedies during pregnancy and postpartum stages for different purposes such as facilitating labor, promoting fetus growth, and lessening as well as other health problems including nausea, vomiting, common cold, anxiety, urinary tract problems, constipation, and lower back pain. However, some herbs may contain harmful substances and will cause miscarriage, premature birth, uterine contractions, or injury to the fetus (Rehamn, 2005; Kim Sooi & Lean Keng, 2013).

Herbal remedies are usually self-prepared by women, mostly by mixing different parts of plants, but some women use prepared and prepackaged HM products. The most important concerns about the use of herbal medicines are the limitation of standards for the specific amounts of ingredients and contamination (Lisha & Shantakumari, 2015).

In Afghanistan, there are no strict regulations regarding HM same as in modern medicine, and therefore, the safety, efficacy, and rational use of HM in FM remains problematic. Hence, the use of FM during pregnancy may be a high risk for the health of both mothers and infants. To our knowledge, no study has been carried out in Afghanistan to evaluate the use of FM and HM among pregnant women.

2. MATERIALS AND METHODS

2.1. Participants

This survey has been carried out at three governmental maternity hospitals namely Malalai Maternity Hospital (MMH), Rabia Balkhi

Maternity Hospital (RBMH), and Isteqlal Maternity Hospital (IMH) in Kabul city, Afghanistan. All the above hospitals have good obstetrics and gynecological services. Women who were seeking health care in the OPD sections were selected for the study from July 2018- to March 2019. Women with severe health conditions or unwilling to participate in the study were excluded. Verbal informed consent was obtained from those who were willing to participate in the study, after explaining the purpose of the study to them. Women who participants in this survey did not have exact knowledge about their family income. Since the majority of them were unemployed. Their response to the question about their economic status was having poor, good economic status, and very good economic statuses. Therefore we categorized their economic status into low income, middle income, and high-income groups.

2.2. Data collection

The data collection included was face-to-face interviews using a structured questionnaire.

It contained mostly close-ended questions including dichotomous and “Likert Scale” questions. Information about demographic characteristics of participants, FM practices, use of herbs, type of herbs used, their opinion about the reason for using herbal remedies, and recommendations for herbal remedies used; were obtained. The collected data were analyzed using Statistical Package for Social Science (SPSS 24).

3. RESULTS AND DISCUSSION

3.1. Socio-demographic characteristics

A total of 390 women participated in the survey. The mean age of the participants was (29) years; 54 % were aged 20- 29 years, about 26 % were aged 30- 39 years; 35.1 % belonged to the urban area of Kabul city, 43.9 % belonged to other provinces and 21 % belonged to the rural areas of Kabul city; 53 %were uneducated and 47 % were educated; 8.2 % were employed, and 73.3 %were from the middle-income group (Table 1).

Table 1. Demographic characteristics of participants.

Variables	Categories	Number	Percentage
Age*	<20	30	9
	20-29	211	54
	30-39	104	26.7
	>40	40	10.3
Residence	Kabul city	137	35.1
	Kabul rural area	82	21
	Other provinces	171	43.9
Education	Uneducated	208	53.4
	Primary	48	12.3
	Secondary	57	14.6
	High school	41	10.5
	Higher education	36	9.2

Job	Unemployed	358	91.8
	Employed	32	8.2
Economic status	Low- income	74	19
	Middle- income	286	73.3
	High- income	30	7.7

*Five participants of the survey population, refused to indicate their age.

3.2. Folkloric medicine practices

This survey showed women use different types of traditional practices during pregnancy. The use of HMs is more common compared to other traditional practices. More than one-third of the participants (36.4 percent) used herbal remedies. About thirty-one percent used other practices. For example, among women who used other practices 58.54 percent followed diet abstinence (avoided eating meat, especially beef,

foods with high protein, cold foods such as yogurt, soft drinks, and cold water, pickles and spicy foods, fatty and salty foods, beans, milk, eggs, and fried foods), 28.29 percent followed religious believes (using amulets, drinking *Aab dam karda*¹ or wearing *Qufle dam karda*² around their waist to prevent abortion) and 15.99% used physical methods such as changing the abnormal position of the fetus by massage (Table 2).

Table 2. Folkloric practices used by women during pregnancy

Traditional practices	Categories	Yes (%)	No (%)
Total User	123 (31.54)		
Diet abstinence	Meat	15 (18.45)	108 (81.55)
	Fatty food	10 (12.3)	113 (87.7)
	Dairy products	12 (14.76)	111(85.24)
	³ Cold food	20 (24.6)	103 (75.4)
	Hot food	3 (3.69)	120 (96.31)
	Spicy food	7(8.1)	116 (91.9)
	Cereal	3(3.69)	120 (96.31)
	Salty food	2(2.46)	121(97.54)
	Total	72(58.54)	51(41.46)
Religious believes	Using amulets	15(18.45)	108(81.55)
	Drinking water (<i>Aab dam karda</i>)	5(6.15)	118 (93.85)
	Eating sugar (<i>bura dam karda</i>)	1(1.23)	122(98.77)
	Binding specific lock around their waist	2(2.46)	121(97.54)
	Total	23(28.29)	100 (71.71)
Physical methods	Massage	13 (15.99)	110 (84.01)

¹One of the practices in afghan religious culture, to heal diseases is incantation of versus of quran on water, food or medicinal herbs by *Mullahs*. This method is called *dam kardan*.

²Another method which advised by *Mullahs* for

pregnant women in order to prevent abortion is to wear a lock (they usually incant versus of Quran on the lock) around their waist until the end of their pregnancy.

³ In traditional medicine it is believed that warm

or hot foods can raise the body's internal temperature, improve circulation, and nourish the body's energy; whereas cold and cool food can lower the body's internal temperature.

3.3. Use of herbal remedies during pregnancy

Medicinal plants (MPs) were more commonly used by women aged 20- 29 years ($N = 70$, 33.2 %). The reasons for using MPs during pregnancy are presented in **Table 4**. Among 142 users, the most frequently reported

reasons for using MPs were effectiveness (29.1%), followed by being cheap (27.7%), cultural and religious concepts (26.2 %), and being harmless (11.3%). Regarding the time of use, women mostly used MPs as needed (31.2%) and during the second trimester (23.4%). The most frequently reported sources of information were family and relative pieces of advice (56.7%) as well as personal experience (33.3%). About 76% of women had no idea but 43.3% thought MPs are relatively effective during pregnancy.

Table 3. Factors associated with herbal remedies use

Characteristics	Categories	Number	Percentage
Use	Yes	142	36.4
	No	248	63.6
Time of use	First trimester	26	18.4
	Second trimester	33	23.4
	Third trimester	38	27
	As needed	45	31.2
Source of information	Relative & friends	81	56.7
	Personal experience	47	33.3
	Other sources	14	10
Effectiveness	Very effective	50	34.7
	Effective	19	13.5
	Relatively effective	61	43.3
	No effect	12	8.5
Reason of use	Effectiveness	42	29.1
	Culture & religion	37	26.2
	Cheap	39	27.7
	Harmless	16	11.3
	Other reasons	8	5.7
Sources	Atari	82	57.5
	Unani practitioner	50	35.4
	Other sources	10	7.1
Previous knowledge	Yes	31	23.9
	No	111	76.1

This survey shows that women use MPs and multiple combinations, which are listed in **Table 4 and Table 5**, respectively.

Table 4. List of Single Herbal Remedies

No	Scientific name	Local Name	Traditional use during pregnancy
1	<i>Althaea officinalis</i> L.	Gul Khatmi	Flower infusion is used for pneumonia and cold.
2	<i>Anethum graveolens</i> L.	Shebet	Seed's powder used for hypertension
3	<i>Entada rheedii</i> Spreng	Qursikamar	Seed's powder is used for body pain
4	<i>Foeniculum vulgare</i> Miller.	Badian	Fruit powder is used for stomach aches
5	<i>Glycyrrhiza glabra</i> L.	Shirin boya	Root's powder is used for stomach ache and cough
6	<i>Heliotropium argzioides</i> Kar.	Ajdumbuta	Herb's powder is used for low back pain
7	<i>Hymenocrater sessilifolius</i> Benth.	Buz bash	Herb's infusion used for pneumonia and body pain
8	<i>Mentha pulegium</i> L.	Podina	Fresh leaves' used for nausea and flatulence
9	<i>Mentha piperita</i> L.	Nana	Leaves' decoction used for flatulence
10	<i>Papaver somniferum</i> L.	Koknar	Decoction of capsule used for pneumonia
11	<i>Plantago psyllium</i> L.	Esfarza	Seed is used for constipation
12	<i>Punica granatum</i> L.	Anar	Powder of cortex used for stomach ache
13	<i>Salvia rhytidea</i> Benth.	Malangan	Seed's infusion used for pneumonia
14	<i>Vitis vinifera</i> L.	Angor	Fresh tendrils used for diarrhea
15	<i>Zingiber officinale</i> Roscoe.	Zanjabil	Rhizome's decoction is used for low back pain and tiredness

It is observed that women used 15 MPs as a single brewed, or fresh herb forms. As mentioned earlier herbal remedy. Parts of MPs used include seeds, women also used MPs as combined herb recipes, leaves, herbs, and roots; in decoction, powder, which are indicated in Table 5.

Table 5. List of Combined Herbal Remedies.

No	Combined herbal remedies	Part used in preparations form
1	<i>Carum copticum</i> (L.) C.B. Clarke in Benth + <i>F. vulgare</i>	Mixed seeds powder is used for Stomach ache and flatulence
2	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Piper nigrum</i> L.	Mixed seeds powder used for flatulence
3	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Artemisia</i> sp.	Mixed seed and herb powder used for indigestion
4	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Achillea millefolium</i> L.	Mixed seeds and flower powder are used for stomach ache
5	<i>C. copticum</i> + <i>F. vulgare</i> + <i>A. graveolens</i>	Mixed seeds decoction used for low back pain
6	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Cassia absus</i> L.	Mixed seeds and leaves powder used for nausea
7	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Z. officinale</i>	Mixed seeds and rhizome decoction are used for stomach ache and cough
8	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Cichorium intybus</i> L.	Mixed seeds and rhizome powder are used for Indigestion
9	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Mentha piperita</i> L.	Mixed seeds and leaves powder used for Indigestion
10	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Z. officinale</i>	Mixed seeds and rhizome powder are used for stomach ache, tiredness & flatulence

11	<i>C.copticum</i> + <i>F. vulgare</i> + <i>Z. officinale</i>	Mixed seeds and rhizome decoction are used for indigestion, nausea & vomiting
12	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Z. officinale</i> + <i>Curcuma longa</i> L.	Mixed seeds and rhizomes powder are used for stomach ache, and flatulence, and as an analgesic
13	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Z. officinale</i> + <i>Ephedra</i> sp.	Mixed seeds, rhizome, and herb decoction used for stomach ache
14	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Z. officinale</i> + <i>Juglans regia</i> L.	Mixed seeds, rhizome decoction used for stomach ache
15	<i>C. copticum</i> + <i>F. vulgare</i> + <i>Artemisia</i> sp. + <i>Prangos pabularia</i> Lindl.	Mixed seeds and herb powder or decoction used for stomach ache
16	<i>C. copticum</i> + <i>F. vulgare</i> †, <i>A. millefolium</i> + <i>Amaranths</i> sp.	Mixed seeds and flower powder or decoction are used for flatulence and stomach ache
17	<i>C. copticum</i> + <i>F. vulgare</i> + <i>A. officinalis</i> + <i>A. millefolium</i>	Mixed seeds, rhizome, and flower decoction used for Pneumonia and cold
18	<i>E. rheedii</i> + <i>Z. officinale</i>	Mixed seed powder and rhizome used for body pain
19	<i>F. vulgare</i> + <i>Z. officinale</i> + <i>Elettaria cardamomum</i> (L.) Maton	Mixed seeds and rhizome decoction are used for stomach ache
20	<i>F. vulgare</i> + <i>Z. officinale</i>	Mixed seed and rhizome powder or decoction used for stomach ache
21	<i>A. officinalis</i> + <i>F. vulgare</i>	Mixed seed and rhizome decoction used for pneumonia
22	<i>A. officinalis</i> + <i>Plantago major</i> L. + <i>S. rhytidea</i>	Mixed rhizome and seed decoction used for pneumonia
23	<i>A. officinalis</i> + <i>Nigella sativa</i> L. + <i>P. major</i>	Mixed rhizomes and seeds infusion used for pneumonia
24	<i>P. psyllium</i> + <i>Cydonia oblonga</i> Miller. + <i>P. major</i>	Mixed seeds decoction used for constipation and pneumonia
25	<i>P. psyllium</i> + <i>Melissa officinalis</i> L. + <i>Descurainia sophia</i> (L.) Prantl in Engler	Mixed seeds and leaves decoction used for cough and pneumonia
27	<i>J. regia</i> + <i>A. graveolens</i> + <i>A. officinalis</i> + <i>A. milifolium</i>	Mixed seeds, flower, and rhizome decoction used for high blood pressure
28	<i>D. sophia</i> + <i>Marrubium vulgare</i> L.	Mixed seed and herbs infusion used for cough
29	<i>P. major</i> + <i>C. oblonga</i>	Mixed seeds decoction used for Common cold
30	<i>S. rhytidea</i> + <i>Curcuma zedoaria</i> (Christm.)Roscoe	Mixed herb and rhizome decoction used for stomach ache
31	<i>D. sophia</i> + <i>green tea</i>	Mixed seed and leaves infusion used for fever and body pain
32	<i>E. rheedii</i> + <i>Indian gum</i> ⁴	Mixed seed and gum powder are used for Low back pain
33	<i>N. sativa</i> + <i>A. officinalis</i> + <i>P. major</i>	Mixed seeds and rhizome decoction used for the common cold

The result demonstrated that combined herbal remedies are mostly used by pregnant women than single herb remedies during pregnancy. We found a total of 32 MPs used in the form of 33 combinations, during pregnancy. *Foeniculum vulgare*, *Carum copticum*, and *Zingiber officinale* were the most common MPs used in different combinations.

This study demonstrated that folkloric pra-

ctices during pregnancy are still popular among Afghan women. The prevalence of folkloric practices and the use of herbal remedies, and the reasons in this study are in line with previous studies (Ali, Azam, & Noor, 2004; Balbontín, Stewart, Shetty & McLay, 2019; Tahery, Mahmodi, & Shirzadegan, 2018; Raphel & Chukwuma, 2011; Mekuria, Erku, Gebresillassie, Birru, & Ahmedin, 2017; Lisha & Shantakumari, 2015).

Low economic status and limited access to health care services are the main reasons for the use of FM practices. Furthermore, socio-cultural factors including the advice of family elders and relatives as well as the general assumption that herbal remedies are safe have an important role in women's decisions regarding such practices. In addition, women aged 20-29 years are the main users of traditional and folk practices, which is consistent with the findings in Bangladesh, Ethiopia, and India. The folkloric practices during pregnancy were found to be more common among women from other provinces and rural areas compare to Kabul city, which indicates less access to health care services and low education levels because most of our respondents were either illiterate or with primary education. Evidence from different countries such as the south of the US, Australia, Europe, Iran, India, Pakistan, and Bangladesh have supported this idea (Ahmed, Hwang, & Hasan, 2018). It has been reported that illiterate women in Etopia are four times and women with low income are three times more inclined to use herbal remedies compared to others (Mekuria, Erku, Gebresillassie, Birru, & Ahmedin, 2017).

Using herbal remedies, food abstinence, wearing amulets, visiting *Mullahs*, and changing the abnormal position of the fetus by massage were the most common practices during pregnancy. They avoid eating specific foods such as beef, dairy products, high fat-containing food, and foods with cold tempers, like yogurt during pregnancy. They claimed that the intake of high-energy food during the first and second trimester of pregnancy would lead them to the risk of obstetric complications of a bigger infant. However, diet abstinence will lead to nutrient

deficiency and will be associated with adverse pregnancy outcomes (Amati, Hassounah, & Swaka, 2019). In China, also women avoid eating different types of meat and believe it is harmful to the baby, for example, eating rabbit meat will cause cleft lip in the baby, or eating shrimp will cause allergy (Swan, Liu, Overstreet, Brazil, & Skakkebaek, 2007). Another study in the US revealed that a diet with a high amount of beef intake would cause a decrease in the number of sperm in a male baby (Swan, Liu, Overstreet, Brazil, & Skakkebaek, 2007). There is evidence that eating pork and cured meat during pregnancy will promote cancer and brain tumor in infants (Huncharek & Kupelnick, 2004). Diet with low carbohydrates and high protein during pregnancy is associated with the risk of an increased level of cortisol throughout the lifetime of the child and results in metabolic acidosis (Shiell, *et al.*, 2001). Since protein is one of the important macronutrients, its deficiency is related to low birth weight, hypertension, and tachycardia in infants. Therefore, taking the required amount of protein is mandatory during pregnancy. Dairy products, and hot and spicy food are also avoided by women in Kabul city. Similar diet abstinence is also common in other cultures and reported in Cambodia, Indonesia, Malaysia, Singapore, and Nepal (Turner, *et al.*, 2017; Amati, Hassounah, & Swaka, 2019) Scientific evidence shows that food with high-fat and poor protein is associated with fatty liver in the infant (Danielewicz, *et al.*, 2017). However, milk and eggs are proven useful for the development of an infant's memory (Shwetha, Shwetha, Krishna, & Usha, 2017). Generally, the impact of inadequate food intake during pregnancy is a high risk for the health of the mothers and the infants.

Pregnancy and having children are very important in Afghan culture. Therefore, women with a low chance of pregnancy and abortions prefer to wear amulets and drink holy water and use abdomen massages to become pregnant and have children. Such practices are also common in other countries like Pakistan, Malaysia, Thailand, Singapore, and Cambodia (Amati, Hassounah, & Swaka, 2019; Withers, Kharazmi, & Lim, 2018).

Folkloric use of medicinal plants in comparison to rational use

The use of MPs during pregnancy was common by women in Kabul city and the most common MPs were *Zingiber officinale*, *Foeniculum vulgare*, *Carum Copticum*, *Glycyrrhiza glabra*, *Mentha pulegium*, *Althea officinalis*, *Salvia rhytidea*, *Curcuma zedorea*, *Achilla mellifolium*, *Plantago major*, *Descurainia Sophia*, and *Entada Rheeli* which are discussed in detail in the following paragraphs.

It has been reported that consumption of *Zingiber officinale* during pregnancy does not have any role on congenital abnormalities, stillbirth, preterm birth, or low birth weight (Heitmann, Nordeng, & Holst, 2013). But new evidence shows that high doses (more than 1000 mg per day) of the plant have a severe abortifacient effect, dilute the blood, and cause stomach upset. (Laelago, 2018; Viljoen, Visser, Koen, & Musekiwa, 2014).

Despite the lack of evidence of teratogenicity, it is recommended that *Foeniculum vulgare* should not be used during pregnancy due to its estrogenic activity (Rahimi & Ardekani, 2013).

Carum Copticum is listed in 14 indigenous MPs that were reported to have been used for abortion in some districts of India (Bairwa, Sodha, & Rajawat, 2012). Besides, it was reported

that *C. Copticum* showed teratogenicity in rat fetuses (Bhadra, 2020) Therefore it may be harmful to be taken during pregnancy.

According to the literature, *Glycyrrhiza glabra* is contraindicated during pregnancy, because it contains glycyrrhizin which is a potent inhibitor of placental 11 β -hydroxysteroid dehydrogenase type 2, a “barrier” to maternal glucocorticoids. Other research has found that consumption of *G. glabra* during pregnancy can change hormone levels and leads to preterm birth, therefore it is not recommended to use during pregnancy (Strandberg, Andersson, McKeigue, & Jarvenpaa, 2002).

Mentha pulegium should not be used during pregnancy due to the presence of a toxic component called pulegone. Because it causes abortion (Esmailzadeh & Moradi, 2017).

Althea officinalis is safe to use during pregnancy and lactation if taken orally. There is no evidence of its side effects (Ahmed, Hwang, & Hasan, 2018).

Salvia rhytidea stimulates the uterus and causes preterm birth and miscarriage, and it is not advised to be used during pregnancy (Wachtel-Galor & Benzie, 2011).

Curcuma zedoria due to its essential oils may cause uterine contractions and abortion (Nimrouzi & Zarshenas, 2016). *Achillea millefolium* is abortifacient due to thujone content. In addition, it reduces fetal weight and increases placental weight (Boswell Ruys, Ritchie, & Brown Woodman, 2003).

Plantago major contains mucilages, and might not have any hazards during pregnancy (Kennedy, Lupattelli, Koren, & Norde, 2016; Gardner & McGuffin, 2013).

There is a lack of information about the safety of *Descurainia Sophia* and *Entada rheeli* use during pregnancy. The use of MPs with un-

known pharmacological activities can pose a potential risk to both pregnant women and their fetuses (Laelago, 2018).

The majority of combined herbal formulations we found in this study contain *Foeniculum vulgare* and *Carum copticum*. The evidence of numerous researches has proved a lack of safety in the use of *Foeniculum vulgare* and *Carum copticum* during pregnancy (Esmailzadeh & Moradi, 2017; Nimrouzi & Zarshenas, 2016; Boswell Ruys, Ritchie, & Brown Woodman, 2003; Boskabady, Alitaneh, & Alavinezhad, 2014; Al-Snafi, 2018).

This survey was limited to Kabul city and there is a need for more research to understand the use of different methods of FM used by women during pregnancy in Afghanistan.

4. CONCLUSION

The use of folklore medicine practices during pregnancy is common among women in Afghanistan. The most important factors for practicing FM in the country were found to be a low level of education, poor economic situation, limitation of modern health facilities, and low access to health services. The most common health problems among women during pregnancy were found to be nausea and vomiting, infectious diseases, digestive problems, and delivery complications. Herbal remedies were found to be the most common practice among women during pregnancy. The most important MPs used during pregnancy were *Althea officinalis*, *Salvia rhytidea*, *Curcuma zedorea*, *Plantago major*, *Descurainia sophia*, *Achillea mellifolium*, and *Entada rheedii*. MPs were found to be used in the single as well as multiple combination forms.

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