



PREVALENCE AND USE OF MEDICINAL PLANTS AMONG PREGNANT WOMEN IN ASSIUT GOVERNORATE

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The present study aims to assess the prevalence and use of medicinal plants among pregnant women in Assiut Governorate for the first time. A cross-sectional, qualitative survey was used for this study. 400 pregnant women completed the questionnaire who attended the women's health clinic of 5 central hospitals in Assiut Governorate. About 66% of women had used medicinal plants in crude forms or as pharmaceutical prepackaged dosage forms during pregnancy. About 77% of them believed that the use of medicinal plants during pregnancy is safe. The study showed that most of respondents using herbs are suffering from nausea, vomiting, colds, cough, heartburn, colic, dyspepsia, flatulence. The most commonly used herbs were; Ginger, Mentha, Guava, Chamomile, Echinacea and Oats. The study emphasized the wide spread use of herbs by pregnant women in Assiut. The majority of pregnant women in Assiut Governorate are confident in using medicinal plants, as they are safe, especially when they are under medical supervision.

INTRODUCTION

There is limited data on the use of medicinal plants by pregnant women in Egypt. This study will determine prevalence and indications of herbal medicine in Assiut Governorate after the remarkable rise in the prices of medicines. Herbal remedy is widespread in patients; professionals should be aware of this, be alert for possible side-effects/interactions. It was used mainly because of word-of-mouth recommendation, dissatisfaction with conventional medicine, and fear of side-effects of conventional treatments. Pregnant and breastfeeding women use herbal medicines and micronutrient supplements for a variety of perceived benefits to their babies' and their own holistic health¹. The use of herbal medicines among pregnant women in Nigeria has been studied². The effect of mint aroma on nausea, vomiting, and anxiety in pregnant women reported that mint aroma can be effective in reducing nausea and vomiting of pregnancy without any effect on state anxiety³. The majority of pregnant

women in Sweden consider the use of medication during pregnancy either 'probably harmful' or 'harmful' and this perception is associated with non-use of medication⁴. A study to investigate whether Japanese Kampo medicines, including Sho-hange-kabukuryou-to, Touki-syakuyaku-san, and Hange-kouboku-to, are safe for fetuses, and whether these medicines reduce hospitalizations and medical costs in pregnant women with hyperemesis gravidarum was performed⁵. The efficacy of dietary supplements and herbal medicines for the care of pregnant women undergoing assisted reproductive technologies (ART) was assessed⁶. The use of licorice and alternative medicines appears to be common in pregnant Danish women⁷. The popularity of herbal medicines during pregnancy in Bangladesh was highlighted. The study showed that previous herbal medicine users and unemployed women turned significantly more to herbal medicines during pregnancy⁸. The use of medicinal plants and concomitant use of pharmaceutical drugs among pregnant women

in Addis Ababa and Bati, Ethiopia was investigated⁹. Plants are commonly used during the antenatal stage in pregnancy to manage different ailments in Africa. In Uganda, both medicinal and food plants are used to handle common pregnancy related conditions¹⁰. The prevalence and pattern of herbal medicines use among pregnant women attending an antenatal clinic at a tertiary maternal hospital in Sierra Leone was determined¹¹.

MATERIALS AND METHODS

A cross-sectional, qualitative survey was undertaken to design method. Design of the questionnaire was as follows: Close-ended questions written carefully and directly. Title written on the first page. The questions were written in Arabic language. Thanking the respondents in the end of the questionnaire. The questionnaire was pre-tested with some women to ensure the contents clarity. The outcomes of the pre-tested questionnaires were not included in the study. A questionnaire was developed and piloted by the team members. The teamwork developed a work plane. They were listed all the research work areas and mapped them against a timeline. The questionnaire was filled in by 500 women who attended the women's health clinic of 5 central hospitals in Assiut Governorate. 400 of them (80%) completed the questionnaire. The samples were selected randomly considering the region of residency of respondents. Data were collected daily from 10 am to 2 pm for 4 months period from 1 August to 1 December 2018, and follow-up on research supervisors. The collected data was analyzed by using SPSS program (Statistical Package for Social Sciences; version 16).

RESULTS AND DISCUSSIONS

Results

Most participants women fill out the questionnaire were from Assiut, Egypt (Table 1). The education levels for the participants women fill out the questionnaire were listed in table 2.

About 66% of respondents had used plants in crude forms or as pharmaceutical prepackaged dosage forms during pregnancy, with 71% preferring self-prepared formulations

(Table 3). About 77% of them believed that the use of herbs during pregnancy is safe. Most pregnant women did not notice the emergence of side effects (Table 4).

Table 1: The residence of the pregnant women.

Residence	Frequency	Percent (%)
Assiut	397	99.25
Out Assiut	3	0.75
Total	400	100

Table 2: Education levels.

Education levels	Frequency	Percent (%)
Illiterate	17	4.25
Primary	28	7.00
Intermediate	40	10.00
Higher School	117	29.25
University	198	49.50
Total	400	100

Table 3: The proportion of women response to the use of herbs during pregnancy.

Residence	Frequency	Percent (%)
Yes	264	66.00
No	136	34.00
Total	400	100

Table 4: The emergence of side effects of commonly used herbs noticed by the pregnant women.

Residence	Frequency	Percent (%)
Yes	381	95.25
No	19	4.75
Total	400	100

The study showed that most of respondents using herbs are suffering from colds, cough, colic, nausea, vomiting, constipation, heart burn, dyspepsia, insomnia and anxiety during pregnancy. The most commonly used herbs were; *Ginger* for nausea, vomiting, colds, cough, dyspepsia and constipation, *Mentha* for colic, dyspepsia and cough, *Guava* for cough, *Chamomile* for insomnia, anxiety and colic, and *Echinacea* for colds (Table 5). About 74% of respondents did

Table 5: Pregnant women complaints and commonly used herbs.

Herb / complaints	Frequency	Percent (%)
<i>Ginger</i> / nausea and vomiting	64	16
<i>Ginger</i> / colds and cough	56	14
<i>Ginger</i> / dyspepsia and constipation	40	10
<i>Mentha</i> / colic and dyspepsia	60	15
<i>Mentha</i> / cough	60	15
<i>Guava</i> / cough	20	5
<i>Chamomile</i> / insomnia and anxiety	20	5
<i>Chamomile</i> / colic	12	3
<i>Echinacea</i> / colds	12	3
<i>Oats</i> / insomnia and anxiety	8	2
<i>Oats</i> / skin irritation	8	2
<i>Oats</i> / source of calcium and magnesium	6	1.5
<i>Frankincense (Olibanum)</i> / nausea and vomiting	6	1.5
<i>Frankincense (Olibanum)</i> / constipation and dyspepsia	6	1.5
<i>Thyme</i> / colds and cough	6	1.5
<i>Cumin</i> / abdominal colic and flatulence	8	2
<i>Fenugreek</i> / nutritive and hypoglycemic	8	2
Total	400	100

not prefer combining herbs with conventional drugs. The women obtained the commonly used herbs from herbs shop in Assiut Governorate.

Discussions

Herbal medication usage is prevalent in both developing and developed countries. The low level of awareness of the possible dangers of some herbs during pregnancy increases the risk of unwarranted sequelae. The prevalence of herbal medication use during pregnancy, during labor and after delivery in the central region of Saudi Arabia was determined¹². The study about use of herbal product among pregnant women in Turkey has showed that almost half of women use at least one herbal product during pregnancy¹³. The present study revealed that use of herbal medicine among pregnant women in Assiut Governorate was high.

Questionnaire explained the motivations that encouraged women to use herbs as a remedy for their complaints. The use of herbs is often effective and safe. In addition, women have fear of side-effects of conventional treatments. The pregnant women used the common and safe herbs. Pregnant women have

shown various reasons for preferring to use herbs such as; herbs being safe and having better efficacy than conventional medicines, traditional and cultural belief in herbal medicines to cure many illnesses, and comparatively low cost of herbal medicines¹⁴. Some practical points might be considered when clinicians counsel pregnant women about herbal medicine. Women should realize that not all herbs are safe. In addition, pregnant women should have attention on the dangers of herbal drug use during pregnancy. The use of medicinal plants among pregnant women in Africa is prevalent, and the most commonly used plant species are not known to have harmful foetal effects during pregnancy. However, many of the medicinal plant species are poorly studied and teratogenic effects cannot be ruled out. Collaboration between healthcare providers and traditional practitioners to inform about the safe use of medicinal plants may promote safer pregnancies and better health for mothers and infants¹⁵. The recommendations of maternity health care professionals and quality of information sources used varied. Further education and access to unbiased safety information is required to empower healthcare

professionals to provide informed recommendations to pregnant patients¹⁶.

Our study summarized that the use of herbs in Assiut Governorate is a reality that exists, and brought positive results with many. But it is important to make people aware of the need to refer to specialists in the event of an herbal treatment of their patients.

Conclusion

The majority of pregnant women who used the herbs had a firm belief that the effect of herbs is more or less similar to the effect of high-priced medicines. In addition, they believed that the use of herbal medicines during pregnancy is safe.

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نشرة العلوم الصيدلانية جامعة أسيوط



شيوخ واستخدام النباتات الطبية بين النساء الحوامل في محافظة أسيوط

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تهدف هذه الدراسة إلى تقييم مدى انتشار واستخدام النباتات الطبية بين النساء الحوامل في محافظة أسيوط لأول مرة. تم استخدام المسح النوعي المستعرض لهذه الدراسة. أكملت ٤٠٠ سيدة حامل الاستبيان الذي حضر إلى عيادة صحة المرأة في ٥ مستشفيات مركزية في محافظة أسيوط. حوالي ٦٦ ٪ من النساء قد استخدمت النباتات الطبية في أشكال خام أو في أشكال جرعة صيدلانية معبأة أثناء الحمل. حوالي ٧٧ ٪ منهم يعتقدون أن استخدام النباتات الطبية أثناء الحمل آمن. أظهرت الدراسة أن معظم المستجيبين الذين يستخدمون الأعشاب يعانون من الغثيان والقيء ونزلات البرد والسعال وحرقة في المعدة ومغص وعسر الهضم وانتفاخ البطن. وكانت الأعشاب الأكثر استخداماً ؛ الزنجبيل ، النعناع ، الجوافة ، البابونج ، إشنسا (القنفذية) والشوفان. أكدت الدراسة الاستخدام الواسع النطاق للأعشاب من قبل النساء الحوامل في أسيوط. غالبية النساء الحوامل في محافظة أسيوط واثقين في استخدام النباتات الطبية ، لأنها آمنة ، خاصة عندما تكون تحت إشراف طبي.