



RESEARCH ARTICLE

ABORTIFACIENT HERBS AWARENESS AMONG SAUDI WOMEN

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ABSTRACT

Background: Evidence on the safety of herbal products use is still inadequate to substantiate their safety among pregnant women. Herbal usage is differing according to geographical availability, experience and believes. Saudi Arabian community is one of those old communities that encouraged herbal medicines and trusting the safety of plants available in the area even during pregnancy. The main objective of this study was to assess the knowledge and attitude of Saudi women toward herbal usage in pregnancy and to identify the commonest herbs used during pregnancy.

Methodology: A questionnaire based cross sectional study conducted in January -march 2017). A total of 577 Saudi women responded to questions regarding demographic data, educational level, gynecological history, believes on herbal Safety during pregnancy and their source of information with listing of abortifacient herbs they knew. Data was analyzed by SPSS version 24.

Results: 67.6 % were in the range between (20-40) years. 76.6% were of high educational level and 34.3% had completed three to five successful pregnancies, 97% are not agree with using herbs in pregnancy. The majority mentioned Ginger, Annise, Cumin, fenugreek as their commonly used herbs in pregnancy. 62% based their information on family and friend's recommendations.

Conclusion: The study emphasized that although high education level effect is reflected on the believes regarding safety ,still usage of herbs during pregnancy is depending on family and friend's experiences and no obvious information provided by expertise in clinics or media to regulate usage and avoid unsafe during pregnancy or even home induced abortion.

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INTRODUCTION

The World Health Organization reported that 70% to 80% of the world population depends mainly on herbs as for their primary medicines (WHO, 2000). Studies indicated that although the practice of herbal consumption in pregnancy was very popular, lack of evidence for the safety and efficacy of herbal medicines utilized during pregnancy was reported (Matthews, 2010). Similarly, other studies emphasized that although herbal medicines unsafety were not proven scientifically, 4% to 62% of pregnant women continued to consume herbal medicines over their pregnancy period with the lack of knowledge about its safety or benefits (Matthews, 2010; Chuang, 2009; Law, 2009; Soon, 2009 and Jennifer, 2010). In Saudi Arabia, it is illegal to induce abortion unless it is done under medical supervision (Toebes, 2014). As using herbs is different according to geographical areas no enough studies on each herbal abortive constituents, effects nor mechanism of abortion.

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Common abortive herbs recognized in the area includes:
LepidiumsativumL.(Brassicaceae). A toxicity study on seeds of L. sativum in Wistar albino rats for 6 weeks was found to be non-toxic at 2%, but toxic at 10% (Adam, 1999 and Bafeel, 2009). *Anastaticahierochuntica* also known as Rose of Jericho, Resurrection plant, *Genggam Fatimah* (Law, 2009) are very commonly in Arabic, *Kaf Mariam* (Mary's hand), It is used as a treatment during last trimester of pregnancy, in the second phase of delivery as they found it facilitates baby birth (Law, 2009), and minimize uterine hemorrhage, and help in expulsion of a dead fetus (AlGamdi, 2011). It has also been used as h anti-oxidant (Khalil, 2009), antimicrobial, (AlGamdi, 2011), and hypoglycemic effects (Rahmy, 2002), scientific evidence considering the therapeutic effects of Kaf Mariam is needing more detailed studying (Law, 2009 and Khalil, 2009). Rose of Jericho consumption during pregnancy needs to be carefully monitored by doctors and caregivers (Rahmy, 2002). *Cinnamomumzeylanecum* (Cinnamon) is commonly used in postpartum conditions. Cinnamon containing sedative and antiinflammatory agents is the most commonly prescribed Chinese herbal, and is used for the management of endometriosis symptoms. Formula mainly for

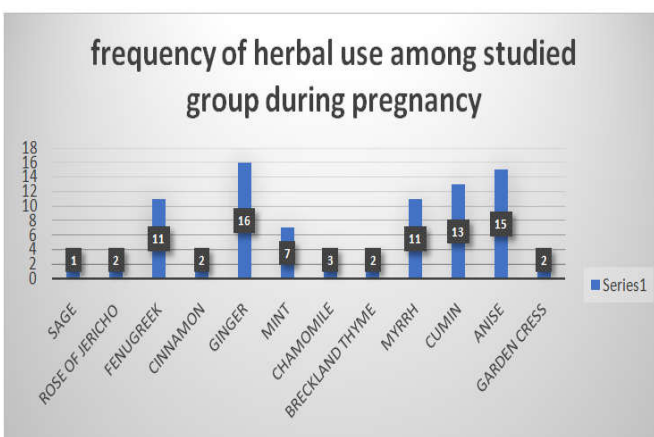
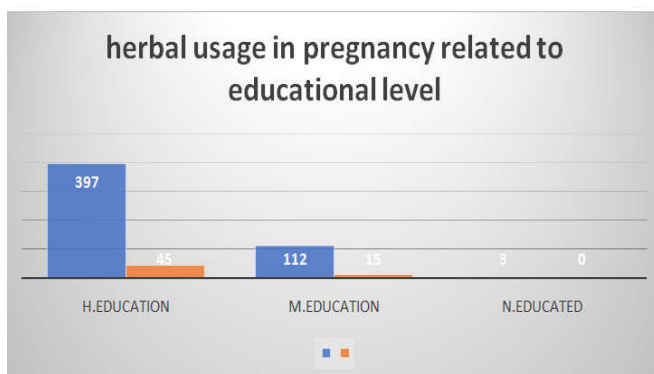
the treatment of endometriosis-related symptomatic discomfort (Ruei-Chi Fang, 2012).

MATERIALS AND METHODS

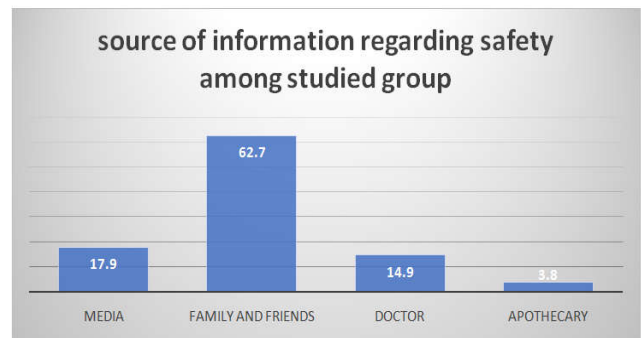
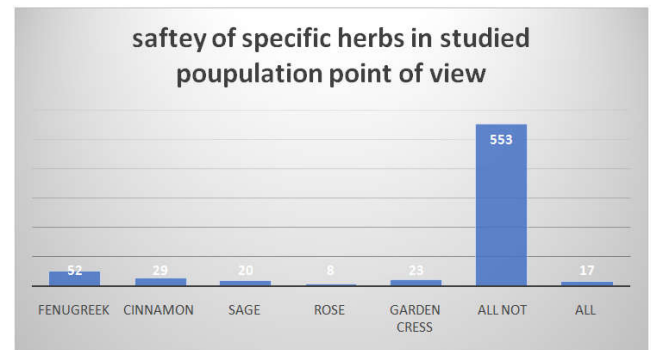
It was a cross sectional study conducted in Saudi Arabia in the period between January and March 2017. Include all married Saudi females who completed questionnaire based survey by personal interview or through internet links. a total of 577 responders answered questions related to demographic data, educational level, gynecological history, expressed their opinions regarding usage, safety of herbs in pregnancy, and listed commonly used herbs in pregnancy they knew. Data were analyzed electronically using computer program (SPSS version 24).

RESULTS

About 577 ladies responded to the questionnaire questions from different age groups 67.6 % were in the range between (20-40) while 2.1 were less than 20 years old. 76.6% are of high educational level and only 0.5% are uneducated 20% completed more than 5 pregnancies with uneventful gynecological history. 46% suffered from abortion history 76% undergone evacuation under medical observation in hospital while only 21% were aborted at home.



Eleven herbs were mentioned by the responders in which Ginger, Anise, Cumin, fenugreek formed the majority. Surprisingly All the responders agreed that fenugreek is completely safe. 97% agreed not all herbs are completely safe to use and 62% based their information on family and friend's opinions. From the personal point of view of studied population 97% are not agree with using herbs in pregnancy versus 3% agreed.



DISCUSSION

Saudi Arabian community is an Islamic Conservative one in which induced abortion is illegal unless under certain medical circumstances so we included only married Saudi women and exclude single ladies. In this study, the survey questions aim was not only to assess the knowledge of the Saudi women regarding abortifacient herbs but also picked up the widely-used herbs in pregnancy and relates educational level with herbal usage in pregnancy. 68% of the studied group were between 20 -40 what reflects the suitable age of pregnancy and expected to have more experiences, while those got pregnant after 40 years or before 20 carries more risks for abortion due to organic causes, group less than 20 years got less educational level and experiences and sometimes not qualified to take the right decisions toward pregnancy issues and depend on the community and families as a source of information. In our study the 76.6% were of high educational level and 90 % of these educated women resumed that they are not using herbs during pregnancy.

Although More than half of the studied group had history of abortion, majority of those agreed to use herbs had less than 3 times of abortion what can relate their abortion to non-organic causes. 76% percent of them conducted abortion safely in the hospital by evacuation or medical treatment, only 24% aborted at home by traditional methods and 10% agreed to use herbs during first trimester. Majority of the study herbal users were using ginger, anise and cumin. British herbal compendium reported that no adverse effects on using ginger during pregnancy while German monograph warn that ginger should not be used depending on data suggesting ginger as mutagenic (¹⁶Pimpinella anisum (anise), belonging to the Apiaceae family, is one of the medicinal plants which has been used for different purposes in traditional medicine (Boskabady, 2001). The relaxant effect of anise was evaluated in vitro as due to inhibitory effects on muscarinic acetylcholine receptors. These results might explain the relieve traditional herbal users expert

only 3% are convinced that all herbs are safe during pregnancy. The majority had exceptions and most of the studied group agreed on not using sage, rose of Jericho, garden cress and cinnamon family and friends were the main source of information for the studied population what reflects the experience based on trials in Saudi community and the defect of media and doctors in discussing such issues.

Conclusion

as usage of herbs is an essential part of Saudi community every day recipes and curing prescriptions, it should be regulated by authorized insinuations with obvious instructions regarding safety and more detailed studies should be conducted to offer enough evidenced based data and make it available through educational curriculums and media to avoid the unsafe using and toxic abortive effects which may be life threatening. More detailed studies on available herbs in the area needs to be conducted to demonstrates beneficial and toxic effects and specify as much as possible.

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