

Adverse drug reactions of herbal medicines during pregnancy amongst Iranian women

K. Raoufi-nejad^{1,*}, M. Javadi², H. Torkamandi³, M. Rajabi¹, A. Moeini⁴, M. Khanavi⁵, K. Gholami²

¹Department of Clinical Pharmacy, Pharmaceutical Sciences Branch, Islamic Azad University, Tehran, Iran.

²Department of Clinical Pharmacy, Faculty of Pharmacy, Research Center for Rational Use of Drugs, Tehran University of Medical Sciences, Tehran, Iran.

³Department of Pharmaceutical Care, Dr. Shariati Hospital, Tehran University of Medical Sciences, Tehran, Iran.

⁴Department of Gynecology and Obstetrics, Arash Women's Hospital, Tehran University of Medical Sciences, Tehran, Iran.

⁵Department of Pharmacognosy, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran.

Background and Aims: The use of herbal remedies has increased despite lack of scientific evidence about their efficacy and safety during pregnancy. This cross-sectional study aimed to explore the usage of herbal products during pregnancy amongst Iranian women based on their sociodemographic characteristics, assessment of side effects in mothers and ultimately their possible effects on neonates.

Methods: In total, 250 postpartum Iranian women and their newborns were recruited during first few days of postnatal period at Arash Hospital in Tehran, Iran. Data were collected in the course of a face-to-face interview by a pharmacist and completion of a questionnaire including maternal sociodemographic characteristics, medical history, pregnancy-related conditions and all medicines used during pregnancy. Questions were used to gather the relevant information for up to one month before pregnancy. Medical notes were scrutinized for neonatal characteristics.

Results: Of all 253 eligible women, 250 (98.8%) agreed to participate. At least one herbal medicine (licensed or unlicensed) was used by 79.6% of the interviewed subjects. The use of herbal drugs was significantly higher amongst the older, higher-educated and primiparous women. Ginger, thyme, mint and rosemary were the most common used licensed herbs. The most frequently unlicensed herbal remedies were mint, frankincense, olive oil and borage. Vitamins, minerals and antibiotics were on the top of the list of non-herbal drugs. Nausea, vomiting and constipation were the most reported side effects with licensed herbal remedies. Regarding neonates, respiratory distress syndrome and jaundice were the most prevalent problems at birth.

Conclusions: This study indicates that taking herbal and non-herbal medications during pregnancy is common amongst Iranian women. Although not always safe, herbals are mostly used according to personal judgment without informing health care professions. Pregnancy care providers should be aware of the potential risks and benefits of the commonly used herbal drugs by the pregnant women.

Keywords: Pregnancy; Adverse drug reaction; Herbal medicine