

OBSTETRIC SHORT COMMUNICATION

Herbal use among pregnant mothers in Ilorin, Kwara State, Nigeria

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Introduction

Drug exposure during pregnancy is a common occurrence (Doering and Stewart 1978; Hogan and Todd 2001). During pregnancy, drug ingestion may not only affect the mother, it may cross the placenta also adversely affecting the unborn fetus, causing congenital malformations and other deleterious effects. In Nigeria, as in many developing countries, access to drugs is poorly controlled and all categories of prescription and over-the-counter drugs are readily available. In recent years, herbal drug preparations have become very popular with little or no information as to their active pharmaceutical components, mode of action, dosage, indications, contraindications, interaction with other drugs, safety during pregnancy or side-effects. Several large studies have been conducted in the USA and UK about drug use in pregnancy. This has received little attention in Nigeria (Gharoro and Igbafe 2001). The aim of this study is to document the use of herbal drug by pregnant mothers in Ilorin, Kwara State, Nigeria.

Patients and methods

The study was carried out at the antenatal clinic of the University of Ilorin, Kwara State, Nigeria between 1 October and 31 December 2005. Pregnant women at various gestational stages were interviewed using a structured pre-tested questionnaire. The information obtained including herbs and kolanut taken during the current pregnancy, the obstetric history and any history of previous deliveries of a congenitally malformed baby. Information was also collected on the gestational age at which these drugs were taken and any prescription information. The data so obtained was analysed by SSP computer software.

Result

A total of 500 pregnant women participated in the study but only 335 questionnaires were adequately completed and used for data analysis. The age of the respondents ranged between 17 and 40 years. Of the 335 respondents, 140 (41.8%) were between 26 and 30 years; 26 (7.8%) were between 36 and 40 years of age and six (1.8%) were teenagers (Table I). Traders constituted 123 (36.7%) of the respondents, while civil

servants and those at school were 63 (18.8%) and 31 (9.3%), respectively. A majority of the respondents, 240 (71.6%), had post-secondary education, while 16 (4.8%) had no formal education. A total of 145 (43.3%) were nulliparous, while 14 (4.2%) were grandmultiparous. Antimalaria drugs were taken by 47 (14%) of the respondents; 41 (12.2%) took native herbal preparations during pregnancy; 37 of them (90.2%) took the herbs on their own or were persuaded to take them by their relatives. Four (1.2%) women attributed their intake of the native herbs to a healthcare provider's prescription. A total of 34 (10%) had taken kola-nut and 41 (12.2%) had taken bitter kola. The native herbs commonly taken were *Alstonia boenai* stem bark (Yoruba name: *Ahun*), *Azadirachia indica* stem bark (Yoruba name: *Dongoyaro*), *Bridelia ferruginea* stem bark (Yoruba name: *Ira odun*), *Khaya grandifoliola* stem bark (Yoruba name: *Oganwo*), *Morinda lucida* root (Yoruba name: *Oruwo*) and *Xylopia aethiopica* fruit (Yoruba name: *Eeru*). There was a significant relationship between variable occupations and to native herb use. Traders used herbal drugs more than other occupational cadres.

Discussion

This study has demonstrated a high use of herbal drugs and use of kolanut by pregnant mothers in Ilorin. The main reason for the use of the herbal drugs was for the treatment of fever and prevention of fever during pregnancy. The use of herbs for malaria is a long-standing practice in Nigeria, especially among the Yorubas (Idowu et al. 2006). It is of concern that herbal drugs could be prescribed by healthcare provider in spite of numerous orthodox formulated antimalarials that are readily available in the country. It is generally believed by most herbal practitioners that pregnant women are prone to feverish attacks in this environment, thus they treat fever as well as other complaints by the pregnant mothers. The common herbal preparations used are *Azadirachia indica* stem bark, *khaya grandifoliola* stem bark, *Khaya senegalis* stem bark, *Morinda lucida* root and *Eustachia chlorantha*. Some of these plants have been documented to have some antimalarial properties (Makinde and Obih 1985; Makinde et al. 1988; Kimbi and Fagbenro-Beyioku 1996; Agbedahunsi et al. 1998; Chukwujekwu et al. 2005).

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Table I. The age of the respondents.

group (years)	n	(%)
17-20	6	1.8
21-25	66	19.7
26-30	142	42.4
31-35	95	28.3
36-40	26	7.8
Total	335	100

The main drawback of these herbal drugs is the lack of specific dose or dose regimen and the fact that their active ingredients are yet to be confirmed and fully understood. Pregnant traders used the herbal preparations more than other occupational groups. The possible reason for this is the fact that their occupation involves interaction with other women in the market where these herbals are prepared and are therefore readily available. The herbal preparations are also cheaper compared with orthodox formula drugs, which cost between US\$0.80 to US\$5.30 per treatment, whereas herbal treatments cost only S\$0.60 (WHO 2003).

In our environment, chewing of kolanut and or bitter kola is common. They are taken for many psychosocial reasons. They are sometimes taken during pregnancy to reduce the nausea and vomiting associated with early pregnancy. Caffeine is contained in kola. There is no evidence that caffeine is teratogenic in humans (Niebly 2002; Merk Manual 2006). Caffeine may however, stimulate the fetus, increasing the heart and breathing rates, as well as decreasing blood flow across the placenta and decreasing the absorption of iron (possibly increasing the risk of anaemia).

In conclusion, herbal use during pregnancy is high in this environment. Pregnant mothers need to be educated on the need for caution when using herbal preparations during

pregnancy, particularly in view of the lack of complete information as to the pharmacokinetics of most of these preparations.

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