



Medicinal Plants Used in Antenatal and Perinatal Care Among the Tiv People of Benue State, Nigeria

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ABSTRACT: An ethnobotanical survey of plants used in prenatal or antenatal and perinatal care in the Tiv speaking areas of Benue State Nigeria is reported. A structured questionnaire was administered to informed respondents to document the traditional practices surrounding conception and contraception, abortion, delivery, prevention of preterm birth and infant mortality. The part of the plants used and purpose are presented. A scientific evaluation of these plants could lead to the development of new drugs to combat preterm birth and save the lives of millions of children worldwide especially in Africa and the developing countries. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

KEYWORDS: Traditional Medicine; Medicinal Plants; Preterm Birth; Antenatal; Perinatal; Tiv; Nigeria.

INTRODUCTION

Medicinal plants for centuries have been exploited for the treatment of diseases and healthcare. The discovery of new disease and health targets coupled with the emergence of drug resistance has rekindled interest in medicinal plants as sources of bioactive compounds for drug discovery [1-3]. Medicinal plants are better exploited when their ethnobotanical uses are considered. A present global concern is preterm birth as reports indicate that 15 million babies are born too soon and over one million die each year [4]. This greatly affects farming populations and creates poverty as the women are perpetually engaged in childbearing and care. The reduction of infant mortality and improved maternal health in rural communities has taken a center stage in healthcare in the last decades. In Nigeria, some strategies adopted are the Midwife Service Scheme to increase access to skilled birth attendants thus reducing maternal, newborn and child mortality and the Kangaroo Mother Care aimed at providing care for preterm births [5]. Achievements in this sector has been huge and according to the Nigerian Demographic Health Surveys (NDHS 2008, 2013) [6,7] there was a substantial decrease in the number of infant and child mortality

between 2003 (513 per 1000 births) and 2013 (329 per 1000 births) [6]. There was an increase in the proportion of women receiving antenatal care from 58% in 2003 to 61% in 2013 but the median gestational age at first visit to a clinic has remained the same at five months over the same period. The percentage of women in the urban areas who received antenatal care was 86% (67 % delivered in a health facility) while the percentage in the rural areas was 46.5% (22% delivered in a health facility) however the number of births in the rural areas was double the number in the urban areas [6]. The Nigerian situation indicates that Infant mortality is directly related to the place of birth as exposure to risk factors which could lead to mortality varies from the urban to the rural areas [8]. Over half of the infant mortalities in Nigeria occur at home. Data from NDHS⁸ also indicate that 35% births are in health facilities, 65% at home or others. About 80% of neonatal deaths are from preterm babies. Perinatal mortality rate in Nigeria is 39 deaths per 1,000 pregnancies. Nigerian newborns and under-five children also die as a result of malaria (20%), pneumonia (15%) and diarrhea (18%). An underlying factor is malnutrition as one-third of all

under-five children suffer from poor nutrition. Major causes of complications after five months of pregnancy are intra-partum related injury (29%), preterm births (28%) and severe infections (26%). Other causes include environment, poverty, ignorance and poor health services. The main causes of maternal mortality are hemorrhage (23%), infections (17%), unsafe abortion (11%), malaria (11%), toxemia/eclampsia (11%), HIV/AIDS (5%) and others (6%) [6-8]. Traditional medicine and medicinal plants are genuinely involved in antenatal and perinatal care in Nigeria. Some of these plants have been used in traditional medicine or as food additives over the years by different cultures and have not been exposed to any scientific investigation. Although religiously inclined Nigerians consider traditional medicine to be evil as it unable to distinguish between treatments and witchcraft, at least one in two persons living in the rural communities use some form of traditional medicine for treatment and in the urban areas most people resort to traditional medicine when hope is lost from orthodox medicine. This study aims to expose through an ethnobotanical survey, the plants and practices involved in the prevention and management of neonatal, perinatal and preterm birth related complications and mortality amongst the Tiv people of central Nigeria. The Tiv people are well known for their long history of traditional medicine coupled with a rich flora of medicinal plants growing in their localities [9-11]. They make up about 2.5% of the population and are distributed in Benue, Taraba, Nassarawa and Plateau states. Their major economic activities are farming, fishing, weaving and art work. Agriculture is the mainstay of their rural economy.

METHODS

Six local governments: Katsina-Ala, Kwande, Konshisha, Gboko, Guma, Gwer and Makurdi the state capital of Benue state were used for the study. Structured questionnaires were administered to the people coupled with in-depth interviews with identified Herbalists and Traditional birth attendants. Seventy questionnaires were administered; ten for each local government and at least one Herbalist or Traditional birth attendant were interviewed in each locality.

RESULTS

The plants, parts of plants and remedies or purpose for which they are used are presented in Table 1. The medicines are usually taken orally as concoctions or decoctions except in some cases where the medicines were applied topically. There were no specific dosages

given for the traditional remedies but patients were encouraged to consume healthy volumes or continue treatment until relief from all symptoms is obtained.

DISCUSSION

99% of the respondents in the local government areas accepted to have used herbs for one form of ailment or another. At least 90% of rural settlers confirmed the use of herbal medicine either as contraceptives, for abortion and conception. 30% had ideas or information on the use of herbs for antenatal and preterm care. In the urban centers, 60% accepted to have used herbal medicine, 40% confirmed the use of herbs either as contraceptives or for abortion and conception while 10% had knowledge on the use of herbs for antenatal and preterm care. A high percentage of the respondents still use traditional medicine for treatment. Some respondents complained of the lack of standardization in traditional medicine as there is no dosage or accurate measure for the medicines, others for the association between traditional medicine and witchcraft. Constraints to the advancement or acceptability of traditional medicine include socio-economic and religious factors, lack of monographs or standardization¹², lack of proper knowledge on toxicity and the poor hygienic methods in their preparation. However, this study confirmed wide acceptability and dependence of the women on these medicinal plants and practices as has been reported for other communities in Africa¹³.

CONCLUSION

Sustaining traditional medicine will go along way to save many species of plants from extinction, lead to the proper utilization of neglected species of plants, transfer of knowledge and skills which could lead to the discovery of new drugs. Therefore steps should be taken to ensure continuity of herbal medicine. Research in this area should employ a pro-traditional medicine campaign, encouraging personal hygiene and attempt regulation, control and dosage. Research results should be disseminated in simpler forms and made available to Herbalists and traditional birth attendants. Incentives should be provided to rural communities by research sponsors, governments or interested parties for sustainability of traditional medicine. Government should make legislative move towards complementing orthodox medicine with traditional medicine. Integrating or complementing orthodox medicine with traditional medicine could also be legislated.

Table1: Medicinal plants, purpose and parts of plants used

Scientific Name	Common Name	Local or Tiv Name	Use or purpose	Part(s) used
<i>Ocimumgratissimum</i>	Tea bush	<i>Kungulekuutamem</i>	Preterm	Leaves
<i>Hibiscus sabdariffa</i>	Guinea sorrel	<i>Ashwe</i>	Preterm	fruits
<i>Elaeisguineensis</i>	Palm tree	<i>Ikye</i>	Preterm	Nuts
<i>Vitellariaparadoxa</i>	Shea butter tree	<i>Chamegh</i>	Delivery	Fruits, Leaves
<i>Ceibapentandra</i>	Cotton wood tree	<i>Vambe</i>	Delivery	Leaves
<i>Ceratothecasesasmoides</i>	False sesame	<i>Neen</i>	Delivery	Leaves
<i>Grewiamollis</i>	Savanna Grew tree	<i>Hueza</i>	Delivery, Conception	Stem
<i>Lagenariasiceraria</i>	Calabash gourd	<i>Jondo</i>	Conception	Leaves
<i>Maytenussenegalensis</i>	Senegal maytenus	<i>Alom</i>	Conception	Stem
<i>Gardenia erubescens</i>	Pubescent edible gardenia	<i>Ishondou</i>	Conception	Stem, Roots
<i>Annona senegalensis</i>	Sour sop	<i>Ahur</i>	Conception	Stem, Roots
<i>Psidiumguajava</i>	Guava	<i>Gova</i>	Conception	Leaves, Fresh branches/twigs
<i>Musa sapientum</i>	Banana	<i>Ayaba</i>	Conception	stem
<i>Morindalucida</i>	Brimstone tree	<i>Akinde</i>	Conception	Stem, Leaves
<i>Kigeliaafricana</i>	Sausage tree	<i>Tyembegh</i>	Conception, Internal wounds	Back, Roots
<i>Senna Occidentalis</i>	Negro coffee	<i>Tsetsa</i>	Conception, open wounds	Stem, Leaves
<i>Carica papaya</i>	Pawpaw	<i>Mbuer</i>	Conception, Abortion	Leaves, Roots
<i>Stereospermumkunthianum</i>	Kunth'sstereospermum	<i>Umanatumba</i>	Internal wounds	Stem
<i>Tephrosiapurpurea</i>	Wild indigo	<i>Agenga</i>	Internal wounds	Stem
<i>Pavettacrassipes</i>	Gland-leaf tree	<i>Ato a ikpan</i>	Internal wounds	Stem
<i>Mucunapruriens</i>	Devil's bean	<i>Imo</i>	Stomach swellings	stem
<i>Nauclealatifolia</i>	Savanna nauclea	<i>Ikurakase</i>	Jaundice	stem
<i>Commiphorakerstingii</i>	Smooth-back commiphora	<i>Avangeundunga</i>	Jaundice	Stem
<i>Azadiractaindica</i>	Neem	<i>Dogoyaro</i>	Abortion	Roots
<i>Lophiralanceolata</i>	Savanna false shea	<i>Ikuranomso</i>	Abortion	Stem, Roots
<i>Burkeaafricana</i>	Wild syringa	<i>Gbagbongom</i>	Abortion	Stem, Roots

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