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PHYTOTHERAPY APPROACH FOR THE TREATMENT OF GYNAECOLOGICAL DISORDER AMONG WOMEN IN IDO LOCAL GOVERNMENT AREA OF IBADAN, OYO STATE, NIGERIA

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ABSTRACT

Ethno-gynaecology is an important field of study relevant to women's reproductive health care. Within the Ido communities in lesser Ibadan, traditional remedies are integral part of the cultural and religious life of the people who are mainly of Yoruba origin. This study reports the phytotherapy information for the treatment of gynecological disorder among women in Ido local government in Ibadan. The structured questionnaires were used to gather information in these local governments, while descriptive analysis was used for data analysis. The villages depend on the herbal medicines for healing of various gynaecological disorders. Nine species*(Gossypium arboretum, Heinsia crinita, Ficus carica, Nicotiana tobacum, Datura metel, Triclisia subcordata, Allium sativum, sorghum bicolor, Casia tora, Perquentina nigrescens and carica papaya)* were identified for the healing of gynaecological disorders among women. The local names, binomial names, parts used and method of administration were documented. This investigation indicates that 60% of the people used leaves to cure while majority of people used tincture (40%), and Decoction (26.7%). A wide spectra of herbal traditional remedies are available to regulate the menstrual cycle, enhance fertility and as either abortifacients or anti-abortifacients. Further studies were suggested to validate the claims and herbal drug development for treatment of such disorder.

Keywords: herbal remedies, gynaecological disorder, abortifacient, decoction

1. INTRODUCTION

According to World Health Organization [1], traditional medicine is defined as diverse health practices, approaches, knowledge and beliefs incorporating plant animal and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being as well as to treat, diagnose or prevent illness.

African traditional medicine is the oldest and perhaps the most diverse of all medicine systems. Africa is considered to be the cradle of mankind with a rich biological and cultural diversity, and there are marked differences between different regions of this continent when it comes to healing practices [2]. Plants and plant-based medicaments are the basis of many of the modern pharmaceuticals we used today for our various ailments [3, 4]. Even today, they remain vital and as much as 67%-70% of modern medicines are derived from natural products [5]. Nearly 80% of the world populations rely on traditional medicines for primary health care, most of which involve the use of plant extracts [6]. Ancient ethnic communities around the world had learnt to utilize their neighborhood herbal flora for various curative as well as offensive purposes [7]. Due to Illiteracy, their knowledge on plants development is often at the cost of their dear lives through centuries. Old experience and wealth of knowledge were not properly and perfectly documented and it had rather been passed down from one generation to another as a domestic cultural heritage. As the ethnic groups migrated from place to place in search of their livelihood, their folklore knowledge also became fragmented and traveled with them often with 'additions and deletions'. In conventional western medicine, gynecological disorders/conditions are often treated with surgery, hormones, non-steroidal anti-inflammatory drugs, antibiotics and so on. Though the efficacy of these treatments is rapid and widely accepted, there are many potential side effects such as nausea and vomiting related to surgery/anesthetics; sexual problems after hysterectomy; skin rash or digestive problems related to drugs, or more seriously liver, kidney, and heart impairment related to some drugs, especially when taken for an extended period. Furthermore, some women may not respond to these treatments. The goal of any treatment is to relieve symptoms as well as to improve and restore the patient's general health, and to improve their quality of life. This may be achieved by integration of complementary or alternative therapy such as herbal medicine into conventional medicine. Ethno medicinal studies are very important in order to understand the social, cultural and economic factors influencing ideas and actions concerning health and illness and also to get information on types of

diseases and health problems prevalent among the people of a particular locality [8].

However, a wide range of herbal medicine are used to regulate the menstrual cycle, enhance fertility, and as either abortifacient or anti-abortifacient research findings in course of time have become basic leads for chemical, pharmacological, clinical and biochemical investigations, which ultimately gave birth to drug discovery.

This study based on the traditional medicine or herbal medicines used by the villages for the treatment of various gynecological disorders among women.

2. MATERIAL AND METHODS

2.1. Study Area

Oyo state is an inland in Southwest Nigeria, with its capital at Ibadan. Ibadan is the largest city in West Africa with a total population of 5.57million and geographical area of 1500 km^2, it lies between 7^0N and 9^0N north of the equator and longitudes2^0E and 5^0E Greenwich meridian [9].

2.2. Sampling Procedure

This study was conducted in three villages namely: Akinsola, Idi-amu and Onikanga villages in Ido Local government. Fifty-questionnaire were distributed among the three villages selected at random during the course of the study.

2.3. Research instrument and Data Collection

Primary data were used for this study. The data were sourced through the use of a well structured questionnaire divided into two sections. Section A was used to collect information about the bio-data of the respondents while Section B addressed issues on the ethnobotany and the characteristics of the plants used to treat women associated problems .The information gathered include name of species, family, part used and dosage. The scientific name of each plant was added according to Gbile and Soladoye [10].

2.4. Data Analysis

Descriptive statistics such as percentages and frequency distribution tables were used to achieve the specific objectives of the study.

3. RESULTS AND DISCUSSION

Elders (between 41 and 50years) constituted the largest group of respondents (46.7-50%). This is an indication that the passage of indigenous knowledge on plant use is probably more from the elders to the younger ones as similarly reported by Adekunle and Sam-wobo [11].

Demographic Characteristics of Respondents

Table 1: Number of respondent with age

Age	Frequency	Percentage
>20years	5	10
40-50years	20	40
>50years	25	50
Total	50	100

Source: Field survey. Lawal, 2011

A total of 50 (100%) were females because the study is female specific which shows prevailence of the disorder in these community (Table 2)

Table 2: Number of respondent according to their Gender

Gender	Frequency	Percentage
Female	50	100
Total	50	100

Source: Field survey. Lawal, 2011

Table 3: Showing the educational Status of the respondent

Education status	Frequency	Percentage
Non-Formal	38	76
Pry	12	24
Total	50	100

Source: Field survey. Lawal, 2011

In Table 3 there was a high level of illiteracy among the respondents. There were 38 illiterate respondents, constituting 76% of the total number of respondents. Only 24% had primary education. The implication of this investigation is that indigenous knowledge (IK), especially on plant use, is not dependent on or affected by western education. However, Formal education may prevent them from improper administration of the herbal drug.

Table 4: showing the Occupation of the respondent

Occupation	Frequency	Percentage
Herb seller	15	30
Herbal Plant user	26	52
Others(Hunters, Farmer)	09	18
Total	50	100

Source: Field survey. Lawal, 2011

This shows the occupation of the respondent (Table 4) fifty –two percent are herbal medicine practitioner, while 30% are herb sellers and 18% are just the percentage of the respondent engaged in other works aside herbal practising based on their indigenous knowledge but not practicing publicly as an occupation.

The methods of application pointed out by the respondents include Decoction, Infusion, Maceration and Tincture. Of all the methods, Tincture has the highest percentage of 38%, while decoction, infusion and maceration have 22%, 12% and 28% respectively. Therefore, it is believed that alcohol extract the active ingredient present in the plant better than other method of extraction.

Table 5: Method of administration used locally for the treatments using herbal plants

Method of Application	Frequency	Percent
Decoction	11	22
Infusion	6	12
Maceration	14	28
Tincture	19	38
Total	50	100

Source: Field survey. Lawal, 2011

From Table 6 among all the parts of the plants used in treating gynaecological disorder, leaves are frequently used (56%) followed by root and stem (24%) and root only (20%). These results showed that the major active ingredients to which the effect is related are concentrated in the leaves.

Table 6: Part of the plant usually used for the treatment of gynaecological disorder among women

Part Used	Frequency	Percent
Root	10	20
Leaves	28	56
Root & Stem	12	24
Total	50	100

Source: Field survey. Lawal, 2011

Herbal treatment of gynaecological disorders among women

The traditional system of medicine using forest plants and plant extracts to treat diseases is almost universal among native people. As such, more and more people now rely on plants as components of their primary health care. Ten plants species were used for the treatment of disorders associated with women in the study areas (Table 7). All these plants have Yoruba/vernacular names which make their identification easy.

Table 7: Plants used for gynaecological disorder in ido local government area of Ibadan

Name of species.	Plant Authority	Family	Vernacular Name	part used	Medicinal preparation	Dosage	Duration
Cassia tora	Linn (Roxb)	Caesapinaceae	Rere	Seed/Bark	Decoction	1 glass cup daily ease delivery	2 weeks
Allium sativum	Linn	Alliaceae	Alubosa elewe	Leaf	Tincture/Maceration	50grams of powdered leaf. Tinctured/ macerated. ½ glass cup shall be taken daily at night (menstrual pain)	1 week
Triclisia subcordata	Oliv.	Menispermaceae	Kanranjangbon	Root	Maceration/Tincture	1 glass cup twice daily cramps)	1 week
Sorghum bicolor	Linn	Poaceae	Poporo	Leaf	Decoction	1 glass cup thrice daily (menstrual irregularity)	1 week
Nicotiana Tobbacum	Linn	Solanaceae	Ewe taba	Leaf	Tincture	¼ glass cup daily early in the morning(menstrual cessation)	1 week
Datura metel	Linn	Solanaceae	Apikan	Leaf	Infusion	1 teaspoon twice daily (Amenorrhea)	2 weeks
Ficus capensis	Thunb	Moraceae	Opoto	Root/Leaf	Decoction/Tincture	1 glass cup before delivery (vagina discharge)	4 weeks
Gossypium arboreum	Linn	Malvaceae	Owu	Root Bark	Tincture	1 glass cup three daily (Amenorrhea/ Dysmenorrhea)	1 week
Heinsia crinite	(Afzel)G.Taylor	Rubiaceae	Tanaposo	Leaf/Root	Tincture/Infusion	½ glass cup thrice daily (discharge/amenorrhea/vagina odor)	1 week
Perquentina nigrescens	Afzel Bullock	Periplocacae	Ewe ogbo	Leaf	Maceration/squeezing	80grams of powdered leaves in 1glass cup daily for Vargina candiasis	1week
Carica papaya	Linn	Caricaceae	Ibepe	Leaf	Maceration/ squeezing	70grams of leaves is drunk to regulate menstrual period	2weeks

Source: Field survey. Lawal, 2011

Leaves were the frequently mentioned organ used, followed by roots and stem, then root alone. Different morphological plant parts play vital roles in the traditional management of disorder in women. Water was used in soaking and boiling of the plant parts in most of the methods of preparation of the herbal recipes for women disorder. This showed that the effect is related to hydrophilic constituents of these plants. This is in agree with Ergon [12] investigation which revealed that plant contain numerous hydrophilic constituents which could be responsible for the medicinal effect. Sofowora [13] reported that many herbal preparations used in traditional medicine are oral preparations in the form of decoctions. These preparations are drunk as described in table 7.

4. CONCLUSION

This paper has presented a herbal approach to the widespread gynaecological disease, this study revealed that most people still rely on herbal drugs for their primary health care. The importance of medicinal plants in Ido Local Government is worth documenting for further research especially with respect to the treatment of gynecological disorder in women. Through the ethnobotanical survey conducted in this local government there are facts which proven the efficacy of these plants (Table 7). Conservation of plants should be encouraged to prevent threat on our valuable flora. Indigenous knowledge and skill must be encouraged and protected in the study area. Plants documented may serve as possible source of new gynaecological disorder healing molecules.

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6. REFERENCES

1. WHO 2002. Traditional medicine strategy 2002-2005. Retrieved from WHO website, (viewed 30.9.2002) www.who.int/medicines/library/trm/trm_strat_eng.pdf
2. Gurib-Fakim, A. *Molecular Aspects of Medicine,* 2006; **27:**1-93.
3. Abraham Z. 1981. *Glimpses of Indian Ethnobotany*, Oxford & Publishing Co., New Delhi, pp. 308-320.
4. Atal CK, Kapur BM. *Cultivation and Utilization of Medicinal and Aromatic Plants*, Regional Research Laboratory (CSIR), 1982; Jammu-Tawi, India pp 266.
5. State of the Environment Report. Ministry of Environment & Forests, Government of India, New Delhi, 2001; pp. 77-79.
6. Sandhya B, Thomas S, Isabel W, Shenbagarathai R. *African journal of Traditional, Complementary and Alternative Medicines*, 2006; **3(1):**101-114.
7. Subramoniam A, Pushpangadan P. Ethnopharmacological validation of traditional medicines. In: *Glimpses of Indian Ethno-pharmacology* by Pushpangadan P, Nyman U, George V, (ed.). TBGRI, Thiruvananthapuram, 1995; pp. 351-360.
8. Lawal IO, Uzokwe NE, Igboanugo ABI, Adio AF, et al. *African Journal of Pharmacy and Pharmacology,* 2010; **4(1):**1-7.
9. National Populations Commision (NPC)-National Population and Housing census, 2006.
10. Gbile ZO,Soladoye MO. Vernacular names of Nigerian plants(Yoruba) 2nd ed. Forestry Research Institute of Nigeria(FRIN), Ibadan, Nigeria. 2002; pp 101.
11. Adekunle MF, Sam-Wobo SO. *Nigeria Journal of Forestry*, 2004; **34(2):**71- 80.
12. Ergon Stahl: Thin Layer chromatography. 2nd ed. Springer-Verlag, New York, 1969; pp 686.
13. Sofowora A. Medicinal plants and traditional medicine in Africa 2nd ed spectrum Books Ltd. Ibadan 1993; pp 77.