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Herbal approaches to the problem of erectile dysfunction in Kaduna State, Nigeria

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Abstract

This paper examines herbal approaches to the problem of erectile dysfunction in Lere Local Government Area of Kaduna State. Structured questionnaires were administered to traditional healers, herb traders, farmers and civil servants. Eighteen families of forest plants were identified for treating impotence, including *Gardenia aquilla, Cola nitida, Annona senegalensis, Ipomoea coptica, Loudetia phragmitoides, Ficus thonningii, Piliostigma reticulatum, Olea hochstetteri, Allium sativum, Khaya senegalensis, Mangifera indica, Moringa oleifera, Ficus sycomorus, Isoberlinia doka, Detarium senegalensis* and *Anogeissus leiocarpus.* Some can be use singly, while most are used combined with others. Methods of preparation include decoction (boiling), infusion (soaking), taking directly with soft drink or meal and bathing. It is important to develop herbal medication as an alternative to orthodox medicine for this problem.

Keywords:

Introduction

It is said that five billion people still rely on traditional plant-based medicines as their primary form of health care. Loss of the world's medical plants may not always be at the forefront of the public consciousness, but if their precipitous decline is not halted, health care will suffer (New Nigerian 2008). Plants were used for medicinal purposes long before recorded history. Indigenous cultures (e.g. African and Native American) used herbs in their healing rituals, while others developed traditional medical systems (e.g. Ayurveda and Traditional Chinese) in which herbal therapies were used systematically. People in different parts of the world tend to use the same or similar plants for the same purposes. Recently, the world Health organization estimated that 80% of people worldwide rely on herbal medicines for some aspect of their primary health care.

Weak erection is caused by an insufficient blood flow to the penile sponge-like tissues. The chambers in the penis that expand and hold blood may not get the necessary blood flow because of a variety of factors that cause the arteries and veins to construct and reduce blood flow. Weak erections happen in two forms: primary and secondary. Primary weak erections refers to a persistent physical problem that may be incurable; secondary weak erections develop over time. Its occurrence damages relationships, not to mention self-esteem and confidence, and can also cause anxiety that can lead to premature ejaculation. Weak erections are also physically responsible for premature ejaculation because of added pressure and stress on the prostate gland.

The problem of weak erections increases with age, and is more common after the age of 40. Sufferers commonly prefer to consider a personal mode of treatment, such as herbal remedies. This paper therefore examines the forest plants used in traditional treatment of erectile dysfunction in Lere Local Government Area of Kaduna State.

Materials & Methods

Lere Local Government Area was created 1989 after splitting the former Saminaka area during the military administration. It covers about 2567 km², with a population of about 330,000 people (NPC, 1991). It is situated in the eastern part of the state between latitude 9^0N and 10^0N and longitude 8^0E and 9^0E. It shares borders with Kano to the north, and Bauchi and Plateau States to the east. In the Guinea savanna vegetational zone, the climate is considered good for

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arable crops. Its people are mainly farmers (rearing cattle), traders and fishermen, with some white-collar workers in the civil service. Rainfall occurs from early October, while the harmattan trade wind starts in mid-October/November and extends to February.

The sampled population covered traditional healers, medicinal traders, civil servants and farmers. A total of 80 questionnaires were administered to respondents randomly chosen in each area. The questionnaire was divided into two sections, the first about the demographic characteristics of the respondent, while the second identified the plants used for treating impotence/weak erection and the methods of use.

Results

Most respondents (Table 1) were between 31-50 year old, male, married and with some degree of edcation.

Table 1: Demographic characteristics of respondents

Variable	Number	%
Age		
10 - 20	2	2.5
21 - 30	6	7.5
31 - 40	25	31.3
41 - 50	25	31.3
51 - 60	12	15.0
> 60	10	12.5
Sex		
Male	56	70.0
Female	24	30.0
Occupational Status		
Traditional heater	21	22.5
Herb trader	32	37.5
Civil servant	26	38.8
Other	1	1.3
Educational Status		
Primary School	21	26.3
Secondary School	29	36.3
Tertiary Institution	16	20.0
No Formal Education	14	17.5
Marital Status		
Single	13	16.3
Married	35	43.8
Divorce	12	15.0
Widow(er)	20	20.0

Table 2 lists the forest plants mentioned by our respondents as being used for the treatment of impotence in Nigeria, giving the part used and the method of administering the herbs. Most respondents boil or soak the herbs before use, and 15% bathe in herb-soaked water; 20% take the herbs directly with soft drinks or food.

Table 2: Medicinal plant treatment for erectile dysfunction

	Local Names	**Name**	**Family**	**Plant**	**Native**	**Part used**	**Uses/Method of Uses**
1	Gaude	*Gardenia aquilla*	Rubiaceae	tree	wild	Root	Cooked with water and taken 2 times a day.
2	Goro	*Cola nitida*	Sterculiaceae	tree	cultivated	Root	Soaked in about 3 l of water and taken 2 times a day.
3	Malmo	*Syzygium guineense*	Myrtaceae	tree	wild	Root	Ground and taken with meals or soft drinks.
4	Gwanda Daaji	*Annona senegalensis*	Annonaceae	tree	wild	Root	Soaked in about 3 l of water and taken 3 times a day.
5	Namijin Gaude	*Gardenia aqualla*	Rubiaceae	tree	wild	Root	Soaked in about 3 l of water and taken 3 times a day.
6	Saiwa dubu	*Ipomoea coptica*	Convolvulaceae	shrub	wild	Root	Ground and taken with meals.
7	Tsintsiyar maza	*Loudetia phragmitoides*	Poaceae	shrub	wild	Root	Cooked with water and taken 2 times a day.
8	Chediya Kalgo	*Ficus thonningii* *Piliostigma reticulatum*	Moraceae Caesalpiniaceae	tree tree	cultivated wild	Bark Oil	Soaked together in about 10 l of water and then bathed in every day, and also drunk 2 times a day.
9	Zaitun Tafarnuwa	*Olea hochstetteri* *Allium sativum*	Oleaceae Alliaceae	tree shrub	wild cultivated	Oil Bulbs	Mixed together and taken 3 times a day.
10	Kashin awaki	*Crossopteryx*	Rubiaceae	shrub	wild	Stem	This herb is soaked in water and drink three times daily.
11	Madachi Mangoro	*Khaya senegalensis* *Mangifera indica*	Meliaceae Anacardiaceae	tree tree	wild cultivated	Bark Bark	Soaked together in water and bathed in every day, and also drunk 3 times a day.
12	Kargo Zogale	*Piliostigma reticulatum* *Moringa oleifera*	Caesalpiniaceae Moringaceae	shrub tree	wild cultivated	Oil ?	Ground together and taken with meals.
13	Baure Doka	*Ficus sycomorus* *Isoberlinia doka*	Moraceae Caesalpiniaceae	tree tree	wild wild	Leaves Bark	Soaked in water; bathed in infusion every day, drunk every morning.
14	Taura Marke	*Detarium senegalense* *Anogeissus leiocarpus*	Caesalpiniaceae Combretaceae	tree tree	wild wild	Bark Leaves	Ground and mixed, taken with soft drink or meals every day.

Table 3 shows that 25% of the respondents boil the herbs before use, 40% soak them in water, 20% take the herbs directly with soft drinks or food, and 15% bathe in herb-soaked water.

Table 3: Methods of preparation of the herbs by respondents

Method of preparation	Frequency	Percentage
Decoction (boiling)	20	25
Infusion (soaking)	32	40
Taking directly with soft drink or meal	16	20
Bathing with herb-soaked water	12	15

Discussion

Rathman *et al* (2002) suggested that the 30-50 age bracket is economically active and responds positively to interventions aimed at improving their productive capacities. Most of our respondents are men, most of whom are married, which showed that they have family to support with the proceeds from the sale of herbs: most were involved as herb traders as their primary occupation, as in rural areas of Ibadan, Oyo State (Adebisi & Gbagir 2006). Most were literate, positively influencing their use of medicinal plants sustainably because of their ability to analyse issues and give fair judgments (Faleyimu *et al* 2008). Eighteen families of forest plants are used for the treatment of erectile dysfunction in Lere Local Government Area (Table 2), some used singly while most are used combined with other plants.

The importance of traditional treatments using forest plants cannot be overstated. The medicinal plants are very effective in the treatment of erectile dysfunction, and most people in rural and urban areas still rely on traditional medicine for their primary health care needs. Based on the findings of this study, the Federal Ministry of Health should identify and encourage traditional healers and herb traders at various local levels to develop their recipes and give incentives to gear them up to providing more help. The Government should prevent the indiscriminate destruction of forests, and encourage cultivation of medicinal plants. The sustainability of biodiversity and biological resources should be a top priority so that medicinal plants do not become driven to extinction.

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الملخص العربى

الطموح فى استخدام الأعشاب النباتية فى علاج عديد من الاختلال الوظيفى (دراسة حالة فى محافظة لير – منطقة كادونا – نيجيريا)

فاليمو و ى – أكينيمى و
الكلية الفيدرالية لميكنة الغابات – أفاكا – منطقة كادونا – نيجيريا

يتناول هذا البحث دراسة الأمال المعقودة على استخدام الأعشاب النباتية فى علاج الاختلال الوظيفى للمواطنين فى محافظة لير – منطقة كادونا – نيجيريا. تم تصميم استبيان وتطبيقه على عدد من العطارين التقليدين وتجار النباتات والمزارعين

والموظفين المدنيين فى المنطقة المذكورة. تم تحليل النتائج من خلال استعراض النسب المئوية ومدى تكرارية الاستخدام لبعض النباتات. أوضحت الدراسة أن هناك 18 فصيلة نباتية تستخدم فى العلاج وتعتبر ذات أهمية للإنسان وتشمل الأنواع التالية: جاردينا أكويللا – كولا نيتيدا – أنونا سينيجلنسيس – إبوموبا كوبتيكا – لوديتيا فراجميتوديس – فيكس ثونينجى – بيلليوستيجما ريتيكولاتوم – ألويا هوشستيلتيرى – اليوم ساتيفوم – خايا سينيجلينسيس – مانجيفيرا إنديكا – مورينلا أوليفيرا – فيكس سيكوموروس – أسوبيرلينيا دوكا – ديتشريوم سينيجلنسيس – أنوجيسوس ليوكاربوس.

أوضحت الدراسة أن بعض هذه النباتات تستخدم بصورة منفردة، وفى أغلب الأحيان تستخدم بصورة مركبة، وكانت طرق التحضير تشمل الغلى – النقع – أو البلع مباشرة مع الماء أو المشروبات الآخرى أو مع الوجبات. ونظراً لأهمية العلاج بالأعشاب فى تلك المنطقة، لذا فإننا نوصى بإجراء البحوث وتطوير العلاج بالأعشاب ليكون بديلاً لبعض الأدوية ذات التأثيرات الجانبية الضارة.