

Herbs for mental disorders

M.O. Nwosu¹

Botany Department, University of Nigeria, P.O. Box 3142, Nsukka, Nigeria

Received 21 October 1998; accepted 12 November 1998

Abstract

Thirty plants belonging to 21 families and traditionally used in southern Nigeria by herbalists for the management of mental disorders (including amnesia, insomnia and senile dementia) are reported. Further clinical experimentation is needed to scientifically evaluate these widely used herbal remedies. © 1999 Elsevier Science B.V. All rights reserved.

Keywords: Herbal remedies; Mental disorders; Nigeria

1. Introduction

Although several aspects of the use of herbal remedies against psychiatric ailments in different parts of the world, including tropical West Africa, have been reviewed [1,2], there is scanty information on the application of herbal medicines in the successful treatment of mental ailments variously known in Nigeria as Ala, Were (in Igbo and Yoruba, respectively). These include schizophrenia and other psychosomatic disorders (congenital or acquired), ‘normal’ or ‘moon-madness’, and spiritual madness believed to be caused by sorcery.

The high incidence of adolescents and adults suffering from psychiatric disorders has recently aroused interest in this field. Some of the contributing factors to this disturbing situation are drug-abuse, hemp smoking, criminality among adolescents, infidelity in marriage, jilting among young people, movement of astral bodies

¹Tel.: +227 234 42771577, fax: +227 234 42770644; e-mail: misunn@aol.com

(moon-madness), witchcraft, and other socio-cultural problems arising from ethnic conflicts [3,4].

The success rate of patients returning to normal family life after being treated by herbalists prompted us to refocus our attention on this old Nigerian medical practice in consideration of its pharmacological and economic potentials [4,5].

2. Materials and methods

A randomised observational study was carried out during 1994–1996 through personal interviews, with the help of interpreters and field assistants mainly assigned to collect data from approximately 115 herbalists/healers in southern Nigeria. Plant families and genera commonly applied by the traditional healers and/or herbalists were recorded following consultation in their herbal homes or clinics. Identification of the collected herbs was done using the flora of Hutchinson and Dalziel [6] and through collaborative work with the Botanic Museum and Botanic Garden, Berlin. When it was not possible to collect samples (e.g. tall sacred trees), plant specimens were photographed in situ and deposited at the University of Nigeria, Herbarium, Nsukka.

3. Results and discussion

The recorded information is listed in Table 1 in alphabetical order of plant botanical names with family, vernacular and/or common names, parts used (mode of use in parentheses) and applications.

Depression, delusion of persecution or delusion of grandeur are among the commonest symptoms of psychiatric ailments. In case of spiritual illness it is believed that a sorcerer, through powers endowed from the underworld (this is comparable to black magic) could 'conjure' madness to an opponent or enemy, including the unborn child in the mother's womb (thus causing the development of some pre-natal deformities). The traditional herbalist and/or healer usually treat these conditions using herbal recipes (in some cases polyherbal decoctions) exerting direct and powerful effects on the central nervous system (CNS). Patients are reported to become more alert and to develop a sense of well-being at least for a brief period, thereby retarding the onset of mental and physical fatigue.

For psychosomatic disorders (e.g. schizophrenia), the herbalist applied an aqueous extract such as that of *Erythrina senegalensis* (leaves) that induces muscle relaxation by blocking acetylcholine receptor sites at neuroskeletal junctions (Ezechukwu Ikechukwu, personal communication). This effect (a reversible paralysis of skeletal muscles) can be desirable and useful for violent and aggressive mental patients. Positive results were also reported for the treatment of a rabid dog bite (Ezechukwu Ikechukwu, personal communication).

Senile dementia, though an usually accompanying symptom in ageing persons (particularly women over 60 years), in this study was observed to be a malady

Table 1
Medicinal plants used in Nigeria for mental disorders

Species	Family	Vernacular or common name	Part used (mode of use)	Applications
<i>Achirantes aspera</i> L.	Amaranthaceae	<i>Abe</i>	Twig (decoction)	Rabid dog bite
<i>Allium sativum</i> L.	Liliaceae	<i>Yabasi ogwu</i> , garlic	Garlic is added to <i>Canthium glabriflorum</i> (infusion) leaves	Hypnotic and sedative
<i>Bixa orellana</i> L.	Bixaceae	<i>Ose uta</i>	Seeds (infusion)	Sorcery, spiritual madness
<i>Boerhavia diffusa</i> L.	Nyctaginaceae	<i>Ara</i> , hogweed	Leaves, stem bark (decoction)	Insomnia, amnesia
<i>Boswellia dalzielii</i>	Burseraceae	<i>Otiti</i>	Leaves, root-bark (decoction)	'Normal' madness
<i>Caesalpinia bonduc</i> (L.) Roxb.	Fabaceae	Senna tea	Leaves (infusion)	Purgative
<i>C. digyna</i> L.	Fabaceae	Senna	Root-bark (decoction)	Senile dementia
<i>Carica papaya</i> L. var. <i>indica</i> L.	Caricaceae	<i>Okwulu beke</i> , pawpaw	Male plant-inflorescences and ginger rhizomes (decoction)	Amnesia, insomnia
<i>Canthium glabriflorum</i> Lam.	Rubiaceae		Root-bark, leaves (decoction)	Depression (psychosomatic cases)
<i>Cassia augustisepala</i>	Fabaceae		Leaves (infusion)	Schizophrenia
<i>Cissampelos mucronata</i> A. Rich.	Menispermaceae		Leaf, stem bark root (decoction)	Nervousness (causes relaxation)
<i>C. owariensis</i> Beauv. ex DC.	Menispermaceae	<i>Pareira brava</i>	Leaf, root (decoction)	Depression
<i>Datura stramonium</i> L.	Solanaceae	Devil egg plant, <i>Anarandi muo</i>	Leaves (infusion)	Schizophrenia (sedative effect)
<i>Erythrina senegalensis</i> DC.	Fabaceae		Ground dried seeds, leaves (infusion)	Purgative

Table 1 (Continued)

Species	Family	Vernacular or common name	Part used (mode of use)	Applications
<i>Euphorbia hirta</i> L.	Euphorbiaceae	<i>Ogwu afo</i> , Asthma herb	Stem exudate	Purgative, 'normal' madness, senile dementia
<i>Khaya senegalensis</i> (Desv.) Juss.	Meliaceae	Dry zone mahogany cail cedrat	Leaf, stem bark (decoction)	Depression
<i>Kolobopetalum auriculatum</i> Engl.	Menispermaceae	<i>Ubele, Uba</i>	Seeds, leaf (infusion)	Insomnia (when taken in higher dose causes depression)
<i>Myristica fragrans</i> Houtt.	Myristicaceae	<i>Efuru</i> , nutmeg	Dried seeds (roasted and added to a meal)	Depression (stimulates CNS and causes relaxation)
<i>Newbouldia laevis</i> (Beauv.) Seem, ex Bureau.	Bignoniaceae	<i>Ogirisi</i>	twig, root-bark, stem (decoction), steam bath (inhalation)	
<i>Pauridiantha viridiflora</i> Schweinf ex Hiern.	Rubiaceae		Leaves, root-bark (infusion, inhalation of steam bath)	Insomnia, amnesia, (induces hypnotic effect)
<i>Phyllanthus discoideus</i> (Baill.) Muell. Arg.	Euphorbiaceae	<i>Uze</i>	Leaf, stem (infusion)	Moon madness, depression
<i>Passiflora foetida</i> L.	Passifloraceae	<i>Ogwu agwo</i> , Passion flower	Fruits, leaves (infusion)	Hysteria (5–10 tablespoonfuls induce a hypnotic and sedative effect)
<i>Psidium guajava</i> L.	Myrtaceae	<i>Gova</i> , guava	Leaves, stem, fruits (infusion)	Sorcery, 'spiritual' madness
<i>Strychnos afzeli</i> Gilg.	Loganiaceae	<i>Ufe</i>	Stem bark (infusion)	'Normal' madness (induces sleep)

Table 1 (Continued)

Species	Family	Vernacular or common name	Part used (mode of use)	Applications
<i>Tetrapleura tetraptera</i> (Schum.et Thonn.) Taub.	Fabaceae (Mimosoideae)		Roasted and ground dried pod (infusion)	CNS sedative, purgative
<i>Vitex agnus castus</i> L.	Verbenaceae	<i>Mbembe</i>	Leaves, root bark (infusion)	Depression (sedative effect)
<i>Zingiber officinale</i> L.	Zingiberaceae	<i>Ginja, ose beke, ginger</i>	Rhizomes (infusion)	Amnesia (stimulates CNS)

allegedly caused by witchcraft or due to a reincarnated ancestor who has returned to the family. The treatment for this was a steam bath prepared from a mixture of herbs such as *Canthium glabriflorum* (rootbark) *Caesalpinia digyna*, *Allium sativum*, and ginger (*Zingiber officinale*) [3,4].

The shaving of the entire hair and beard (male patient) and the cleansing of the gastrointestinal tract with a strong herbal purgative ensure that the mental patient is purified physically and spiritually with incantations by the herbalist (Ezeofor Obinna, personal communication). After these procedures the patient is left outside in the hot sun or under heavy rain. The rationale behind this therapy is to sensitize the patient, his withdrawal from the hot sun or rain serving as an indicator on the progress chart for return to normality (Ezeofor Obinna, personal communication). The use of musical therapy was also noted. The music is played by the inmates using xylophones (calabash) and knocking of empty tin cans and bottles with wooden sticks. It was also observed that some herbal infusions had a marked ability to distort perception over a long distance (remote control).

This study confirmed a high incidence of mental patients including cases of insomnia, amnesia, and senile dementia (normally not classified as 'madness' under Western medicine) currently treated by traditional herbalists. Therefore, there is a need for controlled clinical work in order to investigate this medical practice scientifically without necessarily disrupting the activities of the indigenous herbalists. Further large scale studies could be done by an interdisciplinary team of scientists from pharmacology, pharmacognosy, phytochemistry, botany, and medicine with patents and royalties accredited to the indigenous people of the concerned areas.

Acknowledgements

I am greatly indebted to all the herbalists/healers (particularly Chiefs Obinna

Ezeofor and Ikechukwu Ezechukwu), the field assistants and facilitators, members of my family, especially P.J.C. Nwosu M.D., Chief Consultant/Medical Officer, Onitsha, for assistance in retrieval of medical history, Rev. Fr. (Dr) V.A. Nwosu for assistance on folkloric history and Mrs I.U. Anyaegbunam for nursing counselling. My thanks also go to Dr Bernhard Zepernick, former Curator, Botanisches Museum, Berlin and Mr A. Ozioko of Botany Department, University of Nigeria, Nsukka for technical assistance in herbarium preparation.

References

- [1] Lewis WH, Elvin-Lewis MPF. Medical botany. Plants affecting man's health. New York: John Wiley, 1977:4–420.
- [2] Oliver-Bever B. Medicinal plants of tropical West Africa. Cambridge: Cambridge University Press, 1986:82–83, 88–89.
- [3] Burkill HM. The useful plants of West Tropical Africa, vol. 1, 2nd ed. London: Royal Botanic Gardens Kew, 1985:441–445.
- [4] Nwosu MO. *Baessler Arch* 1990;38:271.
- [5] Balick MJ. In: Hostettmann K, Lea PJ, editors. Bioactive compounds from plants. (Ciba Found. Symp. 154). Chichester: Wiley, 1990:22–39.
- [6] Hutchinson J, Dalziel JM. Flora of west Tropical Africa, vol. 1 and 2, 2nd ed. Millbank, London: Crown Agents for Overseas Governments and Administrations 1964:202–425; 12–57.