#### **REVIEW ARTICLE**

# FROM AFRICA TO BRAZIL, A PARALLEL BETWEEN RELIGION AND TRADITIONAL YORUBA MEDICAL SYSTEMS

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#### Resumo:

The Yoruba are one of the largest ethnolinguistic groups in West Africa. Among the Yoruba and their descendants, medicine and magic are given the same name, oogun, due to the similarity of their practices. From this point of view, Yoruba Traditional Medicine is interconnected with Yoruba Traditional Religion, including a series of religious and therapeutic practices employed in general health care and emotional well-being services. With their forced arrival in America, following Portuguese colonization, these people brought their rituals and their vision of medicine to Brazil, giving rise to the religion known as Candomblé. The objective of this work was to conduct a review study on Traditional Medicine employed by African people of Yoruba ethnicity in Nigeria, drawing a parallel with their descendants (direct and indirect) who practice Candomblé in Brazil, from an epistemological perspective, reflecting on the religiosity and health of these people and the challenges for its consolidation as a traditional medical system.

**Palavras-chave:** Traditional Yorubá Medicine, Ethnomedicine, Ethnobotany, Yoruba, Candomblé.

#### Abstract:

Os iorubás formam um dos maiores grupos etnolinguísticos da África Ocidental. Entre os iorubás e seus descendentes, a medicina e a magia recebem o mesmo nome, oogun, devido à semelhança de suas práticas. Deste ponto de vista, a Medicina Tradicional Iorubá está interligada com a Religião Tradicional Iorubá, incluindo uma série de

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práticas religiosas e terapêuticas empregadas em cuidados gerais de saúde e serviços de bem-estar emocional. Com a chegada forçada à América, a partir da colonização portuguesa, esses povos trouxeram seus rituais e sua visão de medicina para o Brasil, originando a religião conhecida como Candomblé. O objetivo deste trabalho foi realizar um estudo de revisão sobre a Medicina Tradicional empregada pelos povos africanos de etnia Yorubá na Nigéria, traçando um paralelo com seus descendentes (diretos e indiretos) praticantes do Candomblé, no Brasil, numa perspectiva epistemológica, refletindo sobre a religiosidade e a saúde desses povos e os desafios para sua consolidação como sistema médico tradicional.

**Keywords:** Medicina Tradicional Yorubá, Etnomedicina, Etnobotânica, Iorubá, Candomblé

#### 1. Introduction

For many centuries, the use of natural products of plant, animal and mineral origin with therapeutic properties represented the main form of health care available for the prevention and treatment of various diseases in different cultures (PATWARDHAN et al. 2005). This set of customs is known as Traditional Medicine, being defined by the World Health Organization (WHO, 2013) as "the sum of different practices based on theories, beliefs and experiences of different cultures, sometimes without explanation, used in the maintenance of health, prevention, diagnosis, treatment and improvement of physical and mental illnesses".

According to the World Health Organization, 80% of the world population uses or needs some type of traditional medicine for its basic health needs (WHO, 2013), and almost 85% of traditional medicine involves the use of medicinal plants, their active principles or extracts for the preparation of their medicinal products (ALMEIDA et al., 2012).

In developed countries, where allopathic orthodox medicine is predominant, Traditional Medicine is also known as Complementary or Alternative Medicine (WHO, 2013). However, in some developing countries, Traditional Medicine has great adherence and credibility as a primary health care practice, rendering inappropriate the terms complementary/alternative (AGOSTINHO & SILVA, 2012).

In numerous African countries, the set of traditional medical practices established over different cultural practices represents one of the main forms of health care, health maintenance and disease prevention, and cannot be referred to as an alternative (AGBOR & NAIDOO, 2016). In this case, some authors use the term Traditional African Medicine, whose presence is as important as Orthodox Medicine in several locations (ANTWI-BAFFOUR et al., 2014).

The Yoruba forms one of the largest ethnic-linguistic groups in West Africa, dominating the southwestern part of Nigeria and extending to the Republic of Benin and Togo, especially the cities of Lagos, Abeokuta, Ibadan, Ijebu-Ode, Ilesha, Ado-Ekiti, Osogbo, Ilorin, Ogbomoso, and Ile-Ife. According to MATORY (1998) and CAPONE (2005), as a

result of the diaspora process, the Yoruba spread across several regions, especially Cuba (Havana), the United States (New York and South Carolina) and Brazil (Salvador and Rio de Janeiro).

The term Yoruba is usually employed for all these groups linked by a common language with dialectical variants that follow the religious belief of being descendants of a single mythological progenitor, Oduduwa, and of being emigrants from a mythical place of origin called Ilé Ifé (OGUNSANYA, 2015).

Traditional Yoruba Medicine practiced by the Yoruba includes a series of unconventional actions, such as manipulation of plants, use of animal and mineral substances, reading oracles, practicing diets, fasts, baths, incantations, and massage (AMUSA & OGIDAN, 2017). These practices are recognized in several African locations, being employed at general health care services for childbirth care and for the treatment of mental disorders and chronic diseases (AGBOR & NAIDOO, 2016).

Practitioners of Traditional Yoruba Medicine range from healers, mediums and herbalists to priests, who are recognized by communities as holders of knowledge that enables healing and treatment of afflictions of different causes and forms (AWOJOODU. & BAREN, 2009).

Among the Yoruba and their descendants, medicine and magic are given the same name, oogun, due to the similarity of their practices. It often becomes difficult to separate what medicine is from religion, making Yoruba Traditional Medicine also often used as a synonym for Yoruba Traditional Religion (OLUPONA, 1993), where ancestral knowledge becomes more than inspiration, but also a healing practice.

From the African diaspora, with its arrival in Brazil, different groups were reorganized over time, based on the similarities they had with each other, giving rise to the religion of Candomblé (DIAS, 2016). In this context, we highlight the houses that follow the Yoruba religious tradition, called Candomblé Ketu, where the culture and use of Yoruba Traditional Medicine is observed, whose practices were preserved through orality, as well as transmitted by several generations (SANTOS, 2008).

According to VERGER (1995), the Yoruba language was spoken in Bahia during the 19th and early 20th centuries, since a large part of enslaved people slave population was composed of descendants of this ethnic group. Currently, the Yoruba language in Brazil is preserved with restricted use, mainly in liturgical rituals.

A medical system has basic and defined characteristics, which can be perfectly identified in Traditional Yoruba Medicine (AMUSA & OGIDAN, 2017). Among these characteristics, the authors mention: systematic understanding and diagnosis of diseases, causes of diseases, names of diseases, methods of therapy, different forms of medicines (curative/therapeutic and preventive/prophylactic), as well as dynamism of medical practices.

The present study, with an ethnomedical and religious approach, intends to reflect epistemologically on the knowledge of Yoruba Traditional Medicine (Religion), which arrived in Brazil as a result of the black diaspora due to the colonization process. Thus, the objective of the present study was to review the Traditional Medicine, and its main

religious aspects, practiced by African peoples of Yoruba ethnicity in Africa and extended to their descendants throughout Brazil.

## 2. Database and bibliographic review

In order to conduct the bibliographic review and study the body of knowledge related to the researched topic, the reference databases Web of Science, Scielo, Science Direct and Google Scholar were consulted, based on articles published in reference journals, books written by experts and reports from national and international organizations. The search period used works published between January 1980 and September 2021.

To define keywords, authors and articles considered classics and therefore relevant to the study were selected as primary sources. The search terms used were: Traditional medicine, Africa, African, Candomblé, Yoruba, plants, care, health. Multiple terms were also used, such as: Traditional medicine and African and plant, Traditional medicine and plant and Yoruba, Traditional medicine and African and Candomblé and plant, African beverages and Agbo.

## 3. Religiosity and the African conception of health and disease

Traditional medical systems, although distinct and unique, since they are established from different cultures, may have several characteristics in common. Although the transmission of knowledge can occur in different ways, through direct observation (without oral communication) and writing itself, oral transmission is prominent in traditional medical systems.

Some common characteristics, as indicated by O'CONNOR AND HUFFORD (2001): health as a state of harmony or balance, interrelationship of body, mind and spirit, vitalism, magical or supernatural elements, thoughts and emotions as etiological factors and transfer of positive and negative energies.

These characteristics are part of Traditional Chinese Medicine, Ayurveda and Afro-Nigerian Medicine, whose systems are focused on the patient and not on the disease, aiming to promote health and improve quality of life with therapeutic strategies to treat diseases or symptoms in a holistic way (PATWARDHAN et al., 2005).

Although Traditional African Medicine may establish similarities with other traditional medical systems, it becomes unique through its strong connection with religion, divination practices and the performance of sacrifices (PASA et al., 2019). Traditional Yoruba Medicine differs from Western Medicine in that it focuses not only on healing and recovering from physical symptoms, but also on balancing the patient's cultural and spiritual environment, seeking a social and psychological insertion of the individual into their community (NEBA, 2011).

As informed by MELLO & OLIVEIRA (2013), the systems and conceptions of disease, diagnosis and treatment, as well as the conception of life and death, are rooted in the

sociocultural dimension of the African individual, with no possibility of separating the physical from the spiritual. African concepts of disease transcends the organic cause, as its origin may derive from disharmony with ancestors or evil spirits.

This mystical-religious perception can be observed among members of Afro-Yoruba communities established in Brazil (BRAGA et al., 2018). However, it is important to emphasize that Local Medical Systems (LMS) are dynamic and open, thus allowing interaction not only between people, but also with environmental factors over time (ALBUQUERQUE et al., 2024). Traditional Yoruba Medicine practiced in Brazilian territory will also present specific characteristics. The available natural resources are not the same; plants, animals, and minerals used in the therapeutic process needed to be adapted to the new territory.

Thus, good health must be understood not only as the way the individual presents himself, but also as his relationship with his ancestors. It is extremely important that ancestors remain satisfied and "healthy" so that they can protect life (OMONZEJELE, 2008). According to DOMINGOS (2014), in African societies a disease is not a phenomenon that affects only an individual in particular, but at different times it is experienced as a disturbance of social relations. On this basis, illness can represent not only an imbalance of the vital force linked to a single individual, but its origin can sometimes extend to the family or even to the entire community.

Since Yoruba Traditional Medicine understands life as multidimensional, health and, consequently, disease, are also seen from this perspective (DOMINGOS, 2021). According to this conception, healing becomes a broad concept, comprising not only the individual as a whole, but also the community context (OYELAKIN, 2009). For example, abandoning certain traditions and failing to follow certain rituals, seen as essential by the community, can be the origin of serious illness. Breaking with ancestral/religious traditions means breaking millenary ties with the ancestors (MHAME et al., 2010).

An extremely important aspect for understanding this relationship between individual/community/ancestors and the practice of healing is the Yoruban concept of soul or life force. While in the Christian view the spirit is indivisible, in the Yoruba perception it consists of four components: emi, orixá, ori and okan (ADEMULEYA, 2007). Emi corresponds to the divine breath, breathed in by the Creator himself, giving life to human beings.

The orixá represents the divine origin from which each individual descends. It is worth mentioning that, although the Yoruba believe in the existence of a single Creator God, Olorum, they consider the orixás as secondary deities whose mission is to link men to Olorum (BOROKINI & LAWAL, 2014).

Ori represents the spiritual head, the principle of the individuality of the being, which is responsible for the destiny of the human being on earth. Okan means "heart", the one that ensures emotional and psychological strength (ADEMULEYA, 2007). From this perspective, seeking balance between these two principles becomes essential. Thus, ori is the target of specific ceremonies that aim to enhance, balance and nourish this spiritual head so that the individual can also achieve mental and physical health (DIAS, 2013).

Stella de Oxóssi (1925-2018), one of the most respected and recognized "Mães de Santo" (Iyalorisá) of Candomblé in Brazil (the fifth Iyalorisá of Ilê Axé Opô Afonjá in Salvador, Bahia), reports on the possible action of the castor bean leaf (*Ricinus communis* L.) on an individual's ori (SANTOS, 2014, p.222): "Its name in Yoruba is ewé lara, which means leaf that makes the body reborn every day. For this reason, it is common in Candomblé to place a new ewé lara leaf on the head, covered with a white cloth called ojá, so that, by giving more energy to the ori, it is strengthened and, consequently, without pain." A similar purpose is ewé iyá (*Piper umbellatum* L.), recommended for achieving emotional and mental balance (JAGUN, 2019).

Prandi (2001) also mentions a fifth element, egum, the memory of the living in their passage through the land, representing their social, biographical and concrete connection with the community. With the death of the physical body, designated ara, all elements dissipate, with the exception of egum and orixá, which in some cases can return in a new body to be worshiped again, within the same family or by an entire community. Death for the Yoruba does not represent the end of existence, but the return to its origin (PRANDI, 2000).

In Candomblé, during the initiation process, several rites are performed with the purpose of creating and strengthening ties between initiate (ori), orixá and the religious community. With his death, these bonds need to be defective to ensure a good departure or a possible return of this egum or the orixá itself. These ceremonies, which can last up to seven days, are known as Ásèsé, and aim to inform the head (ori) of the deceased person, and also the accompanying orixá, that they no longer belong to that individual and that community (SANTOS, 2008). It is believed that not performing this ritual could have negative consequences for the health of the community itself and also for the family and descendants of the deceased individual (SANTOS, 2008).

In this way, the process of illness and cure necessarily passes through one or several aspects linked to this somewhat complex notion of spirit (soul). Illnesses can be diagnosed by consulting oracles, who indicate what ori or orixá has to say, for example. In this sense, for Afro-descendants of Yoruba origin, whether in Brazil or in Africa, obtaining a cure means reestablishing the lost balance, both on the physical and spiritual planes. The balancing principle is called axé. Although one of its main meanings is "sacred force of the orixás" or "vital force that moves the world", the term is also often used in different situations (BERKENBROCK, 2017).

From this context, axé acts in all fields, whether physical or spiritual, harmonizing these different dimensions and enabling the balance of each individual's existential system. It is interesting to point out that this balance is composed of multiple experiences that do not follow a single pattern, thus causing the healing process to be always viewed in an individualized way according to the axé that is present within each person.

## 4. Healers and Herbalists (Priests and Healers)

Abdullahi (2011) states that in local African communities, traditional medicine practitioners conduct treatment holistically, trying to reconnect the emotional and

social balance of patients based on community rules and relationships, unlike conventional doctors, who treat only disease in patients. According to ROMERO-DAZA (2002), Yoruba Traditional Medicine was for a long time the only source of medical care for millions of people in Africa, both in rural and urban communities.

Yoruba Traditional Medicine practitioners, or traditional healers, can be broadly divided into two main categories: diviner healers and herbal healers (OYEBOLA, 1980; BOROKINI & LAWAL, 2014). The diviner performs the diagnosis usually by spiritual means, while the herbalist plays this role by choosing and applying the relevant herbal remedies. Among the Yoruba peoples of Nigeria, healers receive different denominations according to their form of therapeutic prescription (AMUSA & OGIDAN, 2017).

ADETIBA (2016) identifies three categories: 1- Onisegun or Oloogun, specialized in spiritual practices involving the use of plants; 2- Elegbogi or Elewe Omo, herbalists specialized in combining different herbs to cure diseases without using incantations or rituals, and: 3- Babalawo, diviners who consult the deities through an oracular system to diagnose diseases and prescribe treatments, usually through ritual offerings. OYEBOLA (1980) expands the number of categories and classifies these specialists into five groups, based on the method and set of practices used (Table 1).

Table 1. Yoruba Traditional Medicine Specialists

Table 1. Toruba Traditional Medicine opecianos			
TRADITIONAL YORUBA AFRICAN MEDICINE SPECIALISTS IN NIGERIA			
THE DITTORY IN TOROGRAPH			
DENOMINATION	MEANING/FUNCTION		
Babalawo	This means "father of secrets". The diagnosis and cause of the disease are identified by oracular consultation, performed with the aid of an instrument called opele. Makes preparations based on plants and other elements, including animal sacrifices.		
Onisegun (synonym: Adahunse*)	This means "doctor" and its synonym Adahunse means "one who does something alone". Although he can use divinatory methods, his diagnosis is based on the history and even a clinical evaluation of the patient. The treatment is based on the use of herbs.		
Alasotele	This means "one who announces". This category of healers includes men who have the ability to identify the nature and cause of various diseases, but do not know how to prepare herbal remedies or even prescribe them. All they do is alert the patient and refer him to a Babalawo or Onisegun, who will provide treatment.		
( <i>Iyá/Babá)Olorisa</i> (synonym: <i>Abore</i> )	This means "priest of orisha". They are people in charge of taking care of the different deities, known by the Yorubas as orixás. Their main action is to consult the deities, who will indicate sacrifices and offerings necessary for patient healing.		

Awon eleku-leja	Known as "traditional pharmacists" who provide raw material for the manufacture of various medicines. Generally, they are women who have stalls located in popular markets and who stock all kinds of leaves, bark, fruits, roots and also dried animals. These women also prepare and prescribe medicines such as an infusion with
	various plants known as <i>agbo</i> .

Source: Prepared by the authors, based on OYEBOLA (1980).

In Brazil, Yoruba Traditional Medicine is practiced in Candomblé houses by Iyalorisá (Babalorisá), Olossayin and Babalawo. The first two are responsible for leading and managing the Candomblé houses, carrying out divinatory processes that seek to identify and diagnose a possible treatment based on the will of the orixás, African gods. Babalawo is in charge of performing divinatory games, thus discovering the will of the gods. In his role, he also performs diagnosis and indicates treatments (VERGER, 1995; CAPONE, 2018).

The Olossayin, Babalossayin or Babá Ewé are people initiated in Candomblé who have the function of recognizing the different leaves, their ritualistic names and therapeutic properties within the cult of the orixás (VOEKS, 1997). It is also up to Olossayin to learn and memorize chants, prayers and certain secret words, called ofó, which would have the function of awakening the magical-healing properties present in each plant. It is usually subordinated to the figure of the Iyalorisá, who indicates which leaves will be needed, and it is up to Olossayin to obtain them. Over time, depending on their dedication, their herbalist knowledge can surpass that of their initiator, serving as a reference not only for their community, but also for others.

It is interesting to point out that, during the process of formation and establishment of the Candomblé Tradition, some of the functions initially exercised almost exclusively by the Babalawos and Olossayin started to be attributed little by little to Iyalorixá and Babalorixá, such as the divinatory games and the collection of leaves (BRAGA et al., 2018). The babalorixá and Olossayin, Flávio de Oxaguian (1943-2011), states that (BARROS & NAPOLEÃO, 1999, p.19):

"The knowledge and use of plant species, specific attributions of the bàbálosáyìn or olosányin, were gradually appropriated by the heads of terreiros, due to the insertion of this type of priest in the hierarchical frameworks of the houses of saint. This specialist is under the authority of "mães" and "pais-de-santo". It was the knowledge captured from him that consequently promoted a gradual departure."

Table 2: Similarity between Traditional Medicine experts in Nigeria and Brazil

EQUIVALENT TRADITIONAL AFRICAN MEDICINE SPECIALISTS IN NIGERIA AND BRAZIL			
NAME IN NIGERIA	NAME IN BRAZIL	MEANING/FUNCTION	
Elegbogi	"Erveiro" raizeiro	They are herbalists who do not follow religious rituals. In Brazil, they are usually found in street markets and are not associated with any Candomblé house.	
Onisegun/ (Oloogun)	Olossayin (Babalossayin)	They perform healing through the use of plants, but also employ various ritualistic-religious methods. In Brazil, they must be initiated people who are linked to a specific Candomblé house.	
Babalawo	Babalawo	Specialized in divinatory practices who may indicate ritualistic treatments or even herbal treatments.	
(Iyá/Babá)Olorisa	Iyalorisá Babalorisá	Women/men who take care of the various deities called orixá, performing divination and healing works, which may include the use of plants.	

Fonte: Elaborado pelos autores, com base em OYEBOLA (1980), ADETIBA (2016) e VOEKS, 1997.

Since the religious tradition of Candomblé Ketu has its origins in Afro-Nigerian practices, there is a strong similarity between its cultural and religious aspects, and even in the denomination of its specialists (Table 2). The term Onisegun, which designates one of the main groups of healers in Nigeria, is widely known in Candomblé, indicating one of the main titles attributed to the orixá Ossayin, in the figure of the doctor, herbalist (Figure 1).

Yoruba Traditional Medicine

Ethnomedical and Ethnobotanical knowledge

Religion Orixa

Onisegun

Plants

Agbo

Candomble

Religion

Figure 1: Relevant aspects shared by the Yoruba people in Nigeria and Brazil

Fonte: Autores

These African specialists brought to Brazil not only their medicinal knowledge, but also their own unique vision of how to use and relate to the plant world. The use of herbal remedies and other elements, known as agbo, is an important example. It is essential to emphasize that, during this diaspora process, part of the knowledge produced by Brazilians of African descent also returns to Africa. In fact, several Brazilian plant species (with their forms of use) are taken to the African continent (VOEKS, 1997).

## 5. Role played by plants in Yoruba Traditional Medicine

Among the practitioners of Yoruba Traditional Medicine, there are people who have accumulated over generations the ancestral knowledge of medicinal plants and their effects on the body, keeping them secret and transmitting this knowledge mainly through orality.

According to BOROKINI & LAWALL (2014), the knowledge used by practitioners of Yoruba Traditional Medicine e has different origins such as: Olorum (God) and his messengers known as orixás who, on the basis of their their mythical stories, have produced a vast network of information; encounters with supernatural entities through dreams, trances or visions (OYEBOLA, 1980); observations of the behavior of animals which use plants and minerals; and signature theory, where aspects linked to the morphology and organoleptic characteristics of plants are considered to have curative value (AMUSA & OGIDAN, 2017).

What gives prestige to a specialist (priest) is his ability to unravel and discern the causes of a disease with precision, whether mystical, ancestral or physical, even before starting treatment, which can consist of complex herbal medicines or of a simple offering to Ossayin (OMONZEJELE, 2008).

Ossayin is the deity (orixa) of leaves and health, being considered a herbalist healer, as he knows the secret of the plants that heal. He is usually represented carrying a bundle of iron tools (Figure 2), which he would use to plow the land and grow various types of herbs. In this way, he plays an important role in Traditional Medicine practiced by the Yoruba peoples, both in Africa and in Brazil. He is always present in the different rituals in which medicinal or liturgical plants are used (BOROKINI & LAWAL, 2014), as attested by a very common saying in Candomblé "terreiros": "Kò sí ewé, kò sí òrìsà" (without leaf, there is no orixá) (SILVA GOMES & LESSA CATALÃO, 2015).



**Figure 2.** Representations of the orixá Ossayin at Dique do Tororó, Salvador-BA (A), elaborated by the artist Tatti Moreno and at the Botanical Garden of Rio de Janeiro-RJ (B) and no. Photos: Jonatas J. L. S. Silva.

Several medicinal plants used are effective in the treatment of diseases, as documented by the ethnobotanical knowledge of the Yoruba peoples and Afro-Brazilian communities (BARROS & NAPOLEÃO, 1999; ABD EL-GHANI, 2016; VERGER, 1995). ALMEIDA (2016, p.45) states: "It can be said, therefore, that the popular use of medicinal plants under these conditions constitutes a complex unofficial health system in which "herveiros", religious centers and the community participate".

In this context, it is worth mentioning agbo, a herbal remedy widely used in Nigeria, indicated in cases of common diseases such as malaria (ADETUTU et al., 2011). In Brazil, agbo is presented in a different way from the Nigerian preparation, but it stands out among the Candomblé communities (VOEKS, 1997). Although it has the same name, and is prepared based on several plant species, Nigerian agbo is different from the agbo used in Candomblé.

In Brazil, agbo is considered a beverage with a strongly entheogenic character, and whose effectiveness is closely associated with strict religious and ritualistic precepts, which together can promote not only trance, but also its therapeutic action. Agbo is used at all times, from initiation to funeral rites. Its action provides the physical and spiritual strengthening of the individual, and can be used with the aim of curing diseases and also promoting or facilitating the arrival of the orixá during trance (BARROS & NAPOLEÃO, 1999).

## 6. Role of Yoruba Traditional Medicine in providing care

Traditional Medicine plays a fundamental role in the provision of care in African societies, especially in rural areas, where the population initially tends to search more for traditional doctors, often searching for hospitals only when symptoms worsen (ABDULLAHI, 2011). Another extremely relevant aspect is that these healers are often inserted in the same community, thus offering differential treatments through counseling and based on personal information that allow a greater feeling of reception on the part of the patients (OZIOMA & CHINWE, 2019).

A study carried out by EBOMOYI (2009) on Nigerian students of orthodox medicine and other areas of knowledge, pointed out that the mystical aspect of Yoruba Traditional Medicine, together with the difficulties in regulating traditional medical practices, constitutes one of the main barriers to the acceptance and cooperation between orthodox and traditional doctors (AJIBOLA, 2003).

Traditional Medicine, therefore, tends to be conceptualized within a hierarchical model of knowledge and sophistication of thought, where orthodox medicine occupies the top hierarchical place and Traditional Medicine represents the lower stratum (ABDULLAHI, 2011). Historically, this thought has spread across the African continent since the colonialist period, when the practice of Traditional Medicine came to be subjugated by orthodox medicine, but still remained even after the independence of most African countries.

Although there is some resistance to incorporating Yoruba Traditional Medicine into the practices of the health care system of Nigeria, the Federal Government established the Natural Medicine Development Agency of Nigeria, with the aim of encouraging the study, documentation, preservation and promotion of traditional practices and their integration with the health system (OKOJIE, 2015). The combination of modern allopathic drugs and traditional herbal remedies is a fast-growing practice among many Nigerians, who believe in its effectiveness (ADEFOLAJU, 2011). Thus, it is important to further implement laws and rules that will allow the regulation and professional development of practitioners of Traditional Medicine.

As reported by XU & CHEN (2011), in countries such as China, the integration between Traditional Medicine and Western Medicine has been explored for more than a century, leading not only to tolerance, but also to its assimilation by the entire population. On this basis, treatment modalities that are not considered part of conventional medicine are evaluated and researched, serving as important tools for the improvement and enrichment of orthodox medicine (OZIOMA & CHINWE, 2019).

### 7. Yoruba Traditional Medicine in Brazil, the Candomblé "terreiros"

According to LOPES (2004), since the African diaspora, or rather, the forced arrival of enslaved Africans, the rituals and philosophy of these peoples have been brought to the New World. During the slavery period, the situation of enslaved blacks was precarious, due to the poor working and nutrition conditions imposed on them, leading to serious health conditions and a drastic reduction in life expectancy, as described by BARBOSA

et al. (2016). In this context, not only various wounds and worms, but also the so-called "diseases of the body and soul" were cured based on the knowledge of Yoruba Traditional Medicine (OLIVEIRA et al., 2016), which crossed the ocean and was perpetuated in the New Continent, allowing the health of the sick to be restored through prayers, blessings and other practices (PIMENTA & GOMES, 2016).

Although the practice of spells and prayers represented an important aspect of the healing process used by enslaved Africans, the empirical manipulation of poisons, their antidotes and plant properties allowed some of the enslaved people slaves who knew Yoruba Traditional Medicine to gain fame in the community in which they lived, where they were even allowed some social concessions and monetary return (ESMARALDO PAZ et al., 2015). The manipulation of herbs also represented a form of resistance against the pains of slavery.

CAMARGO (2007), in his study on *Petiveria alliaceae* L. (amansa-senhor) pointed out that herbal preparations were secretly given to slave masters in small doses for a long time, with the aim of weakening their brains, causing them to fall into starvation and slowly die. Such action was often intended to protect enslaved black women from the harassment of their masters or to render these masters a little more affable in daily life.

The Candomblé religion is the result of myths, rituals, symbols and the sacred language of different ethnic groups that traveled in the diaspora, in successive waves, and were recreated in Brazilian lands (SILVA & LESSA CATALÃO, 2015). In the so-called "casas de santo", "terreiros" or swiddens of candomblé, tradition was maintained and at the same time re-signified in the daily lives of Afro-Brazilians, thus establishing its record and its mark in the urban space (BASTIDE, 1978). According to COSSARD (2006), the first available information about African-based religions in Brazil refers to the healing services offered by Africans and their descendants.

According to SILVA (2007), more than 30,000 terreiros existed in the country, constituting the different expressions of religions of African origins. Although it has roots in the African continent, Candomblé is considered to be a brazilian religion that has also been exported to other countries such as the US (FONSECA & BALICK, 2018; NIEL & PEREIRA, 2019). Thus, these spaces took on the function of materialization of the collective memory of Africans and their ancestors, since for African philosophy collectivity is one of the main foundations of life. Belonging to a group means belonging to its memory (FARIAS et al., 2016).

Candomblé is an initiatory religion, where, after the initiation process, which can take 17 to 21 days in houses called Ketu, the individual is inserted into the so-called "família de santo" or "família de axé", which does not necessarily correspond to his biological family (CAPUTO & PASSOS, 2007). From then on, the initiate follows and respects the hierarchy and the religious tradition inherited from African ancestors, founders of the mother houses. In this context, the "família de santo" comes to represent an important reference in the different moments of the initiate's life (CAPONE, 2018).

Candomblé houses can be seen as a space for welcoming and promoting health since the religiosity present in these environments offers meaning to life in the presence of daily pain, generating a network of support and health promotion for sick individuals, allowing health restoration and a better response to conventional and traditional medical treatments (BRAGA et al. 2018). A good example of this relationship is the first contact of individuals with religion, which occurs through the oracular consultation

known as "game of cowries". It is a moment when difficulties are deciphered based on the interpretation of Iyalorixá from the perspective of Candomblé, an occasion when comfort and advice are offered, thus representing the first therapeutic effect of this religion (NIEL & PEREIRA, 2019).

In a survey of several Candomblé Ketu houses, MOTA & TRAD (2011) observed that one of the main motivations for looking for terreiros would be the search for alternatives to cure physical and psychological suffering, with the main health complaints being headache, fainting spells, depression, disturbances of vision, tachycardia, amnesia, skin diseases, rheumatic fever, convulsions, alcoholism, insomnia, and nervous and intestinal diseases.

Sometimes, due to the lack of access to public or private health services, Candomblé houses represent the first source of care for an individual, as often highlighted by Dr. M. Z. Almeida (Figure 3) in the following sentence from his lectures and classes: "The Candomblé terreiros already prioritize care. They practice in their territories the philosophy recommended by the SUS (Unified Health System) with regard to the search for comprehensive health, expressed as the prevention of diseases and the promotion, maintenance and recovery of health. And, above all, the terreiros welcome the patients." (ALMEIDA, 2019)<sup>3</sup>.

<sup>3</sup> Transcript of the presentation given by Almeida in his lecture entitled "The recognized diversity of the pharmaceutical properties of the Brazilian flora: from the offices of natural history in the 19th century to the laboratories of universities", during the XII Brazilian Symposium on Pharmacognosy, on May 9, 2019.https://sbfgnosia.wixsite.com/12sbfgnosia/programacao-1.



Figure 3. Mara Zélia de Almeida (In memorian – 01/14/1955 to 01/24/2022). (A) In the Farmácia da Terra Program, conceived by her and implemented at the Federal University of Bahia, Salvador-BA; (B) Candomblé Terreiro, Festa da Boa Morte, Cachoeira, Bahia, Brazil; (C) Cover of the book "Medicinal Plants" with liturgical emphasis on Candomblé; (D) Back cover of the book with the representative tool of Ossayin. Photos: Mayara de Queiroz.

According to Mandarino et al. (2019), Candomblé terreiros have a role not only as a religious space, but also as places of social claims:

The initiatives of social projects, cultural programs and Health Fairs are significant actions aiming to provide communication channels with the wider society, seeking social legitimacy either as a religious temple or as a social agency, as well as acting as weaving mechanisms for the preservation of this complex system of practices and unique knowledge of this religious group in question.

Although Traditional and Complementary Medicine has been part of the Unified Health System (SUS) in Brazil since the 1980s, and its practice has intensified after the

National Policy for Integrative and Complementary Practices (PNPIC), with the public offering of services such as phytotherapy, homeopathy and Traditional Chinese Medicine/Acupuncture (SOUZA & TESSER, 2017), no activity or therapeutic practice associated with Traditional African Medicine had been implemented (SILVA, 2007). This fact could reflect both the absence of public policies that promote the maintenance and appreciation of these practices and the prejudice suffered by the secular religious traditions of the "terreiro peoples". Recognizing the presence of terreiro communities in health care implies recognizing the vitality of the terreiros and their extraordinary capacity for resistance and creative recomposition (SILVA et al., 2020).

Finally, on July 20, 2023, the Plenary of the National Health Council (CNS) published Resolution No. 715 (item 46), whose strategic orientation recognizes cultural manifestations of African origin as complementary practices to conventional SUS care (CNS, 2023). It highlights the role of Afro-Brazilian houses of worship (terreiros) in promoting health, emphasizing a holistic approach and their importance as places to combat racism and religious intolerance. This resolution suggests that the Ministry of Health recognize the different therapeutic practices of traditional peoples of African origin and Traditional Territorial Units of African Origin as health and healing facilities that complement the SUS. Within this context, these practices could be incorporated into the SUS, for example, through the Integrative and Complementary Health Practices (PICS) program.

## 8. Positive aspects and limitations of Yoruba Traditional Medicine

Yoruba Traditional Medicine can be understood as an important therapeutic mechanism whereby the patient is taken care of in his entirety, thus offering several advantages. Orthodox medical systems are characterized by high technology, but they have a somewhat limited vision when dealing with subjective, affective or psychological components that accompany certain diseases to a greater or lesser extent, making it impossible to provide conclusive or satisfactory answers to many problems (BARROS, 2002). Once the health/disease relationship is understood holistically, cultural and social factors and the way individuals view their illness process facilitate their recovery (MHAME et al., 2010).

Traditional Medicine is popular for the solution of health problems since considerable portions of the Nigerian and Brazilian population do not have access to modern health services and have economic difficulties in obtaining medicines available on the market (NEBA, 2011; SILVA et al., 2020). In rural areas, the great distances traveled to reach the nearest health posts, combined with the low concentration of doctors, make the care of traditional healers the most viable option and often the only available resource (WHO, 2014). On the other hand, a series of traditional preparations used for the treatment of diseases little understood by modern medicine, such as diseases of the immune system, cancer and viruses, become attractive to the adepts of this therapeutic modality (SOFOWORA et al., 2013).

Specialists in Yoruba Traditional Medicine use an immense variety of plants with

medicinal properties, which increase annually due to scientific research (SOFOWORA et al., 2013; EL-GHANI, 2016). In addition, this Medicine allows the use of these plants by these specialists for the treatment of diseases, strongly contributing to the preservation of knowledge about the use of medicinal plants and its transfer to future generations.

Although Yoruba Traditional Medicine is extremely important for a considerable portion of the population of Yoruba origin, as well as for most African peoples, it has some limitations. Major challenges include content, preparation, quality of mixtures and duration of treatment whith prolonged systemic exposure, lack of clinical data to validate ethnobotanical claims and insufficient regulatory oversight (NWAIWU & OYELADE, 2016). There is a need to identify the active components of these plants and subsequently determine their correct dosage (ADEFOLAJU, 2011).

Another limitation is the absence of safety and efficacy tests for humans through clinical trials, since most traditional medicines have not been subjected to scientific studies (MUTOMBO et al., 2023). However, it should be noted that this is a limitation of most traditional and popular therapeutic preparations around the world, especially with regard to native species in developing countries, and in plant associations.

Regarding the "need to adapt" Traditional Medicine to the scientific model, Ferreira (2013, p.216) emphasizes that:

For traditional medicines to be integrated into the official health system, it is necessary to submit them to two processes: scientific validation of their knowledge and practices, and the qualification of the practitioners. While the former gives science the role of scrutinizing them, seeking to purify them of cultural traits by producing scientific evidence on their effectiveness, the latter establishes the need for practitioners to be duly qualified in courses that introduce them to basic public health knowledge, in view of the regulation of their craft. In this case, regulation means disciplining and placing these practices and practitioners under the direct supervision of the State. In the context of official discourses, by decontextualizing knowledge, practices and practitioners, these practices become fragmented in their constitutive principles, acquiring the status of a 'disembodied' object of public policies.

From this same perspective, Traditional Chinese Medicine has been under strong pressure to adapt its practices in the direction of "Western medical knowledge" and thus enable its validation by the scientific model of biomedical research. Introspective notions of how each individual can access his health potential are being replaced by materialist/concrete and rationalist descriptions of Western medicine (CONTATORE, 2018).

The way Yoruba Traditional Medicine works prevents it from being disconnected from religious aspects, which can generate prejudice and make it difficult to insert it into medical systems as a complementary integrative practice (EBOMOYI, 2009). Thus, there is a possible devaluation by health professionals of what constitutes practices related to unconventional medicine, which range from prayers to phytotherapy. CUETO & PALMER (2014, p.11) state:

As part of the culture of a defeated society, politically and ideologically coherent forms of indigenous and African medicine were typically subordinated and partially suppressed by European colonization, and colonial powers were unwilling to formally preserve or cultivate indigenous systems of healing. Until recently, they were mostly rejected (if not persecuted) by exponents of orthodox medicine who considered them superstitions that would disappear with time. They were, however, generally more tolerated than is often thought, especially as a repository of the virtues of medicinal plants. More recently, official health institutions have recognized the importance of indigenous and Afrodescendant medicines, although the relationship they may have in practice with orthodox and official medicine is still far from clear.

There is still a limitation on the part of healers to identify and perform the correct diagnosis of some diseases (ADEFOLAJU, 2011), especially the more serious ones, which can also pose considerable health risks. Finally, some plants used in Yoruba Traditional Medicine are considered toxic, teratogenic or abortifacient and may pose serious risks during pregnancy and childbirth (KAMSU-FOGUEM & FOGUEM, 2014).

Some governmental strategies can be applied in order to promote the development of Traditional African Medicine, such as the promotion of guidance about procedures, or good practices and behaviors, which favor greater reproducibility of the safe and effective use of treatments provided by Yoruba Traditional Medicine practitioners. Encouraging the production of traditional medicines, with the inclusion of forms of cultivation of medicinal plants and information about their efficacy and safety also become important strategies.

#### Final considerations

The search for new therapeutic practices aims to achieve health, well-being and relief from imbalances, suffering and various types of illness. Understanding the practices associated with traditional medicine, how they developed and how they still exert a direct influence on our lives to a greater or lesser extent to understand the cultural reality of those who need this therapeutic assistance. This corroborates the current need to establish care models based on an approach that relates human health to the existing dynamism between biological, psychosocial, environmental, cultural and spiritual phenomena.

The understanding of Yoruba Traditional Medicine by Western societies has major limitations, since in this type of medicine the healing process is closely linked to the religious aspect and to African concepts of health, disease and medicine. Its acceptance implies a rupture from western paradigms strongly based on the rigidity of scientific methodology, since traditional healing practices cannot be easily subjected to scientific tests, as is the case with orthodox medicine. This leads to a lower acceptance by a non-African public, which can lead to cultural conflicts with possible discriminatory situations.

This study represents a starting point for reflection on the contributions of Traditional Yoruba Medicine, practiced for generations not only in Africa but also throughout Brazil

by Afro-Brazilian peoples. These peoples have managed to maintain their set of religious practices and rituals originating from the African continent for centuries through oral and experiential transmission, thus deserving a different and more appropriate look in terms of Public Policies. Once the importance of these practices is recognized, their implementation in public health programs needs to understand and respect the dynamics that this traditional medical system presents.

It can also be said that Candomblé stands out not only as a religious manifestation, but also as an important medicinal alternative for Afro-descendant populations in Brazil. There is an open field in the area of health education for academic debate regarding the presence of religious aspects in the clinical process. However, often due to lack of knowledge and prejudice, the knowledge produced through traditional Afro-Brazilian medical systems is ignored and neglected. From this perspective, this research opposes the hegemonic biomedical model that does not value the cultural dimension and discourages attention to religious beliefs, particularly those inherited from African peoples.

#### Conflict of interests

The authors have no conflicts of interest.

#### Authors' contribution

All authors contributed to the design, research, structuring and writing of the manuscript.

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#### References

ABD EL-GHANI, M. M. Traditional medicinal plants of Nigeria: an overview. **Agriculture** and Biology Journal of North America, Colorado, v. 7, n.5, p. 220-247, 2016.

ABDULLAHI, A. A. Trends and challenges of traditional medicine in Africa. **African Journal of Traditional, Complementary and Alternative Medicines**, Nigeria, v. 8, n. 5, p. 115-123, 2011.

ADEFOLAJU, T. The Dynamics and Changing Structure of Traditional Healing System in Nigeria. **International Journal of Health Research**, Nigeria, v. 4, n. 2, p. 99-106, 2011.

ADEMULEYA, B. A. The concept of Ori in the Traditional Yoruba Visual Representation of Human Figures. **Nordic Journal of African Studies**, Sweden, v. 16, n. 2, p. 212–220, 2007.

ADETIBA, A. S. Traditional medicine in the fight against malarial fever in colonial lagos: a historical exploration. **Nsukka Journal of History**, Nigeria, v. 3, p. 23-37, 2016.

ADETUTU, A.; MORGAN, W. A; CORCORAN, O. Antibacterial, antioxidant and fibroblast growth stimulation activity of crude extracts of Bridelia ferruginea leaf, a wound-healing plant of Nigeria. **Journal of Ethnopharmacology**, South Africa, v. 133, n. 1, p. 116-119, 2011.

AGBOR, A. M. & NAIDOO, S. A review of the role of african traditional medicine in the management of oral diseases. **African Journal of Traditional, Complementary and Alternative medicines**, Nigeria, v. 13, n. 2, p. 133-142, 2016.

AGOSTINHO, A. B. & SILVA, H. L. DA. **Desafios da medicina tradicional africana no século XXI.** Atas do Congresso Internacional Saber Tropical em Moçambique: História, Memória e Ciência, Lisboa, p. 01-09, 2012.

AJIBOLA, S. T. Traditional medicine, our culture, our future. **The African health monitor**, Republic of Congo, v. 4, n. 1, p. 4-37, 2003.

ALMEIDA, G. S.; BARBOSA, A. S.; SANTANA, M. DE. Conhecimento e uso de plantas medicinais da cultura afro-brasileira pelos moradores da comunidade da fazenda velha no município de jequié-BA. **Veredas da História**, Salvador, v. 5, n. 2, p. 27-39, 2012.

ALMEIDA, M. Z. DE. Plantas medicinais. Salvador, EDUFBA, 2016, 3 ed. 221p.

AMUSA, S. B. & OGIDAN, C. A. Yoruba Indigenous Medical Knowledge: A Study of the Nature, Dynamisms, and Resilience of Yoruba Medicine. **Journal of the Knowledge Economy**, v. 8, n. 3, p. 977-986, 2017.

ANTWI-BAFFOUR, S.S., BELLO, A.I., ADJEI, D.N., MAHMOOD, S.A., AYEH-KUMI, P.F. The place of traditional medicine in the African society: the science, acceptance and support. **American Journal of Health Research**, v. 2, p. 49-54, 2014.

AWOJOODU, O. & BAREN, D. Traditional Yoruba medicine in Nigeria: A Comparative Approach. **Bulletin of the Transilvania University of Braşov**, Brasov v. 6, n. 51, p. 129-136, 2009.

BARBOSA, M. DE O.; LEMOS, I. C. S.; KERNTOPF, M. R.; FERNANDES, G. P. The Practice of Traditional Medicine in Brazil: A Rescue Historic of Colonial Times. **Caçador**, v. 5, n. 1, p. 65-77, 2016.

BARROS, J. A. Pensando o processo saúde doença: a que responde o modelo biomédico? **Saúde e Sociedade**, São Paulo, v. 11, n. 1, p. 67-84, 2002.

BARROS, J. F. P. DE & NAPOLEÃO, E. **Ewé òrisà**: **uso litúrgico e terapêutico dos vegetais nas casas de candomblé jeje-nagô**. Rio de Janeiro: Bertrand Brasil, 1999, 516 p.

BASTIDE, R. O candomblé da Bahia: rito nagô. Brasília: Editora Nacional, 1978, 298 p.

BERKENBROCK, V. J. The concept of ethics in Candomblé. **Horizonte**, Minas Gerais, v. 15, n. 47, p. 905-928, 2017.

BOROKINI, T. I. & LAWAL, I. O. Traditional medicine practices among the Yoruba people of Nigeria: A historical perspective. **Journal of Medicinal Plants Studies**, India, v. 6, n. 2, p. 20-33, 2014.

BRAGA, A. P.; DE SOUSA, F. I.; DA SILVA JUNIOR, G. B.; NATIONS, M. K.; BARROS, A. R. C., & DE AMORIM, R. F. Perception of Candomble Practitioners About Herbal Medicine and Health Promotion in Ceará, Brazil. **Journal of Religion and Health**, Australia, v. 57, p. 1258–1275, 2018.

CAMARGO, M. T. L. DE A. Amansa senhor - a arma dos negros contra os seus senhores. **Revista Pós Ciências Sociais**, São Luíz, v. 4, n. 8, p. 31-42, 2007.

Albuquerque, U.; Cantalice, A.; Oliveira, D.; Oliveira, E.; Santos, F.; Abreu, M.; Brito-Júnior, V.; Ferreira Júnior, W. How Do Local Medical Systems Work? An Overview of the Evidence. **Economic Botany**. v. 78, p. 1-16, 2024.

CAPONE, S. Les Yoruba du Nouveau Monde: religion, ethnicité et nationalisme noir aux États-Unis. Paris: Karthala, 2005, 395 p.

CAPONE, S. **A busca da África no Candomblé: Tradição e poder no Brasil**. Rio de Janeiro. Pallas, 2018, 400 p.

CAPUTO, S. G. & PASSOS, M. Cultura e conhecimento em terreiros de Candomblé - lendo e conversando com Mãe Beata de Yemonjá. **Currículo sem Fronteiras**, v. 7, n. 2, p. 93-111, 2007.

CONTATORE, O. A.; TESSER, C. D.; BARROS, N. F. DE.. Chinesemedicine/acupuncture: historical notes on the colonization of a body of knowledge. **História, Ciências, Saúde-Manguinhos**, Rio de Janeiro, v. 25, n. 3, p. 841-58, 2018.

COSSARD, G. O. Awó: o mistério dos orixás. Rio de Janeiro: Pallas, 2006, 232 p.

CUETO, M. & PALMER, S. Indigenous Medicine, Official Health, Medical Pluralism. In: Cueto, Marcos; Palmer, Steven. Medicine and Public Health in Latin America: A History (New Approaches to the Americas). Cambridge: Cambridge University Press, 2014, p.10-57.

DIAS, J. F. Candomblé is Africa. Forgetfulness and Utopia in the Candomblé jeje-nagô. **Cadernos de História**, Minas Gerais, v. 17, n. 26, p. 64-82, 2016.

DIAS, J. F. Orí O! A ideia de Pessoa, a Problemática do Destino e o Ritual do Borí entre os Yorùbás e no Candomblé (Orí O! The Idea of Person, the Problematic of Destiny and the Ritual of Borí among the Yorùbá and in Candomblé). **HORIZONTE - Revista de Estudos de Teologia e Ciências da Religião**, v. 11, n. 29, p. 70-87, 2013.

DOMINGOS, L. T. The complexity of the religious dimension of African traditional medicine. **Mneme-Revista de Humanidades**, Caicó, p. 15, v. 34, p. 167-189, 2014.

DOMINGOS, L. T. Traditional African Religion. **Brazilian Journal of Development**, Paraná, v. 7, n. 1, p. 10690-10698, 2021.

EBOMOYI, E. W. Genomics in Traditional African Healing and Strategies to Integrate Traditional Healers into Western-Type Health Care Services- A Retrospective Study. **Researcher**, v. 1, n. 6, p. 69-79, 2009.

EL-GHANI, M. M. A. Traditional medicinal plants of Nigeria: an overview. **Agriculture** and Biology Journal of North America, v. 7, n. 5, p. 220-247, 2016.

ESMERALDO PAZ, C.; SANTIAGO LEMOS, I. C.; BRITO MONTEIRO, Á.; DE ARAÚJO DELMONDES, G.; PIMENTEL FERNANDES, G.; MELO COUTINHO, H. D. & KERNTOPF, M. R. Plantas medicinais no candomblé como elemento de resistência cultural e cuidado à saúde. **Revista Cubana de Plantas Medicinales**, Habana, v. 0, n.1, p. 25-37, 2015.

FARIAS, K. P.; CROSSETTI, M. D. G. O.; GÓES, M. G. O. D. & PORTELLA, V. C. Prácticas en salud: visión del anciano negro en una comunidad religiosa afrobrasileña. **Revista Brasileira de Enfermagem**, Brasília, v. 69, n. 4, p. 590-597, 2016.

FERREIRA, L. O. A emergência da medicina tradicional indígena no campo das políticas públicas. **História, Ciências, Saúde-Manguinhos**, Rio de Janeiro, v. 20, n. 1, p. 203-219, 2013.

FONSECA, F. N. & BALICK, M. J. Plant-Knowledge Adaptation in an Urban Setting: Candomblé Ethnobotany in New York City. **Economic Botany**, New York, v. 729, n. 1, p. 56–70, 2018.

JAGUN, M. Ewé: a chave do portal. 1.ed. Rio de Janeiro: Litteris, 2019, 965 p.

KAMSU-FOGUEM, B. & FOGUEM, C. Adverse drug reactions in some African herbal medicine: literature review and stakeholders' interview. **Integrative Medicine Research**, Korea, v. 3, n. 3, p. 126-132, 2014.

LOPES, N. Enciclopédia brasileira da diáspora africana. São Paulo, Selo Negro, 2004, 752 p.

MANDARINO, A. C. DE S.; GOMBERG, E.; MACHADO, I. B. Conexões entre Terreiros de Candomblé, Agências Sociais e Saúdes. Revista Brasileira de Pesquisa Em Saúde/Brazilian Journal of Health Research, Vitória, v. 21, n. 2, p. 134-143, 2019. Recuperado de https://periodicos.ufes.br/rbps/article/view/29086. Acesso em 15 de Março de 2023.

MATORY, J. L. Yorubá: as rotas e as raízes da nação transatlântica, 1830-1950. **Horizontes Antropológicos**, Porto Alegre, v. 4, n. 9, p. 263-292, 1998.

MELLO, M. L. & OLIVEIRA, S. S. Saúde, religião e cultura: um diálogo a partir das práticas afro-brasileiras. **Saúde e Sociedade**, São Paulo, v. 22, n. 4, p. 1024-1035, 2013.

MHAME, P. P.; BUSIA, K.; KASILO, O. M. J. Clinical Practices of African Traditional Medicine. **The African health monitor**, Republic of Congo, v. 14, p. 32-39, 2010.

MOTA, C. S. & TRAD, L. A. B. We Live to Take Care of the Population: health care strategies and meanings for health, disease and healing in candomblé temples. **Saúde e Sociedade**, São Paulo, v. 20, n. 2, p. 325-337, 2011.

MUTOMBO, P.N; KASILO, O.M.J.; JAMES, P.B.; WARDLE, J., KUNLE, O.; KATERERE, D.; WAMBEBE, C.; MATSABISA, M.G.; RAHMATULLAH, M.; NIKIEMA, J.B.; MUKANKUBITO, I.;

SHERIDAN, R.; SANOGO, R.; NISSAPATORN, V.; SIVAKORN, C.; TRIPATHY, S.; GOYAL, R.; DHOBI, M. Experiences and challenges of African traditional medicine: lessons from COVID-19 pandemic. BMJ Global Health, 2023. 8:e010813. doi:10.1136/bmjgh-2022-010813.

NEBA, N. E. Traditional Health Care System and Challenges in Developing Ethnopharmacology in Africa: Example of Oku, Cameroon. **Studies on Ethno-Medicine**, Haryana, v. 5, n. 2, p. 133-139, 2011.

NIEL, M. M. & PEREIRA, P. P. G. Oogun Àṣẹ: Candomblé practices and health care in New York City, USA. **Interface**, v. 23, p. 1-14, 2019.

NWAIWU, O., & OYELADE, O. Traditional herbal medicines used in neonates and infants less than six months old in Lagos Nigeria. **Nigerian Journal of Paediatrics**, v. 43, n. 1, p. 40-45, 2016.

O'CONNOR, B. B. & HUFFORD, D. J. **Understanding folk medicine. Healing logics: Culture and medicine in modern health belief systems.** Utah State: University Press Editors . 2001, 13-35.

OGUNSANYA, A. O. Changing patterns in feeding, dressing and naming among yoruba of south-western Nigeria since 1960. **Nigerian Journal Of Social Studies**, Nigeria, v. 17, n. 2, p. 33-47, 2015.

OKOJIE, E. A. Impacts of Regulatory Mechanisms on Trado-Medical Practice in Nigeria. **Journal of Law, Policy and Globalization**, v. 38, p. 115-128, 2015.

OLIVEIRA B. M.; LEMOS, I. C. S.; KERNTOPF, M. R. & FERNANDES, G. P. The Practice of Traditional Medicine in Brazil: A Rescue Historic of Colonial Times. **Revista Interdisciplinar de Estudos em Saúde**, Santa Catarina, v. 5, n. 1, p. 65-77, 2016.

OLUPONA, J. K. The Study of Yoruba Religious Tradition in Historical **Perspective. Numen**, v. 40, n. 3, p. 240-273, 1993.

OMONZEJELE, P. F. African concepts of health, disease, and treatment: an ethical inquiry. **Explore**, v. 4, n.2, p. 120-126, 2008.

OYEBOLA, D. D. O. Traditional medicine and its practitioners among the yoruba of Nigeria: A classification. Social Science & Medicine. Part A: Medical Psychology & Medical Sociology, Oxford, v. 14, n. 1, p. 23-29, 1980.

OYELAKIN, T. R. Yoruba Traditional Medicine and the Challenge of Integration. **The Journal of Pan African Studies**, California, v. 3, n. 3, p. 73-90, 2009.

OZIOMA, E. O. J. & CHINWE, O. A. N. Herbal Medicines in African Traditional Medicine. Herbal Medicine. V. 10, p. 191-214, 2019.

PATWARDHAN, B.; WARUDE, D.; PUSHPANGADAN, P.; BHATT, N. Ayurveda and Traditional Chinese Medicine: A Comparative Overview. **Evidence-Based Complementary and Alternative Medicine**, v. 2, n. 4, p. 465-473, 2005.

PIMENTA, T. S.& GOMES, F.. Escravidão, doenças e práticas de cura no Brasil. Rio de Janeiro: Outras Letras, 2016, 380 p.

PRANDI, R. Conceitos de Vida e morte no ritual do axexê: Tradição e tendências recentes dos ritos funerários no Candomblé. In: Martins, C. & Lody, R. (orgs). Faraimará o caçador traz alegria: Mãe Stella, 60 anos de iniciação. Rio de Janeiro: Pallas, 2000, 412 p.

PRANDI, R. O Candomblé e o tempo. Concepções de tempo, saber e autoridade da África para as religiões afro-brasileiras. **Revista Brasileira de Ciências Sociais**, São Paulo, v.16, n. 47, p. 43-58, 2001.

ROMERO-DAZA, N. Traditional Medicine in Africa. **Annals of the American Academy of Political and Social Science**, Pennsylvania, v. 583, p. 173-176, 2002.

SANTOS, J. E. DOS. **Os Nagô e a Morte: Pàde, Àsèsè e o Culto Égun na Bahia**. 13. ed. – Petrópolis: Vozes, 2008, 304 p.

SANTOS, M. S. A. O que as folhas cantam: para quem canta folha. Salvador: UNB, 2014, 230 p.

SILVA GOMES, V. M. & LESSA CATALÃO, V. M. "Kosi ewe, kosi orisa" (no leaves, no orisha): ecologic experiments in a candomble 'terreiro'. **Ambientalmente Sustentable**, Coruña, v. 20, p. 1857-1877, 2015.

SILVA, J. M. D. Religiões e saúde: a experiência da Rede Nacional de Religiões AfroBrasileiras e Saúde. **Saude e Sociedade**, São Paulo, v. 16, n. 2, p. 271-77, 2007.

SILVA, M. O. Saindo da invisibilidade – a política nacional de povos e comunidades tradicionais. **Inclusão Social**, Brasília, v. 2, n. 2, p. 7-9, 2007.

SILVA, R. A. D.; FERNANDEZ, J. C. A.; SILVA, M. D. F. D. S. To take seriously what the terreiros have to say about health. **Religião e Sociedade**, Rio de Janeiro, v. 40, n. 3, p.145-168, (2020).

SOFOWORA, A.; EYITOPE, O.; ADEDEJI, O. The Role and Place of Medicinal Plants in the Strategies for Disease Prevention. **African Journal of Traditional, Complementary and Alternative Medicines**, Nigeria, v. 10, n. 5, p. 210–229, 2013.

SOUZA, I. M. C. D. & TESSER, C. D. Traditional and Complementary Medicine in Brazil: inclusion in the Brazilian Unified National Health System and integration with primary care. **Cadernos de Saúde Pública**, Rio de Janeiro, v. 33, n. 1, p. 1-15, 2017.

VERGER, P. F. **Ewé**: o uso das plantas na sociedade ioruba. São Paulo: Companhia das Letras, 1995, 768 p.

VOEKS, R. A. Sacred leaves of Candomblé. African magic, medicine, and religion in Brazil. University of Texas, 1997, 256 p.

WHO (World Health Organization). 2013. **Traditional medicine strategy: 2014-2023**. Geneva: World Health Organization, 78 p. Disponível em: https://iris.who.int/bitstream/handle/10665/92455/9789241506090\_eng.pdf?sequence=1. Acesso em 20 apr 2022.

XU, H., & CHEN, K. J. Integrating traditional Medicine with Biomedicine towards a Patient-Centered Healthcare System. **Chinese Journal of Integrative Medicine**, Beijing, v. 17, n. 2, p. 83-84, 2011.

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