Full Length Research Paper

The perception and beliefs on tuberculosis among traditional healers in Remo North Local Government Area, Ogun State, Southwestern Nigeria

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With the aid of a pre-tested semi-structured interview questionnaire, 30 traditional healers in Remo North Local Government Area of Ogun State in the Southwestern part of Nigeria were identified by their certificate of apprenticeship. A cross-sectional study was carried out to assess their knowledge on the symptoms of tuberculosis, their perceptions, beliefs and their practices as regards to the management of tuberculosis. A large percentage (60.0%) of the traditional healers knew the symptoms of tuberculosis but did not refer to the hospital because they believed that the disease is due to witchcraft, spells, poisons, eating forbidden food, familial causes, alcohol, cigarette smoking or mystical causes, and 70.0% rely on herbal concoctions to treat the disease. Intensive tuberculosis health education should be extended to traditional healers. Government through public health institutions should mobilize health educators and organize workshops to educate the traditional healers about tuberculosis. The referral system should be improved- that is, via these organized workshops. The traditional healers need to be conversant with early signs and symptoms of tuberculosis for early referral to the appropriate health institutions.

Key words: Tuberculosis, perception, tuberculosis health education, referral system.

INTRODUCTION

Tuberculosis (TB) is a chronic infectious disease in human beings caused by *Mycobacterium tuberculosis*, and it is transmitted from man to man mainly by droplet inhalation when the infectious agent is coughed into the air, and also through contact; thus making it a disease of public health importance. However, tuberculosis remains a public health problem especially in developing countries. In spite of control activities in Nigeria since 1942, TB control objectives do not seem to have been achieved. This disease is one of humanity's most ancient plagues with well documented cases having been found in both the old world (Egyptian) and the new world (Peruvian) mummies. (Warren and Mahmoud, 1985).

Over the past two to three centuries, TB has been responsible for approximately one billion human deaths.

It kills 1.5 million people each year. (CORE Group, 2008). It is one of the leading global causes of morbidity and mortality (Iademarco and Castro, 2003). Today, tuberculosis remains common throughout most of the world with one-third of the world's population estimated to be infected with it. It remains a major public health problem in developing countries, contributing greatly to the burden of disease (WHO, 2010a b, 2011,). Various studies have focused on the knowledge, perception and health-seeking behavior of communities to accessing qualitative care (Nkulu et al., 2010; Legesse et al., 2010; Abebe et al., 2010; Rintiswati et al., 2009). A well-established fact is that cultural beliefs affect health-seeking behavior as well as interpretation of symptoms. Traditional names were given to the disease in different languages to recognize it's long term nature- "consumption" in English, "Chakhotka" (declining) in Russia and "assul" (stealing away) in Arabic (Ruck, 1997).

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The tubercle bacillus was first isolated by Robert Koch in 1882 (Pearson, 1982). Further researches were carried out to discover more about the disease and how it could be treated. In 1945, Feldman and Hinshaw discovered that streptomycin was effective for the treatment of tuberculosis in man. Ever since then, a number of other anti-microbial agents suitable for the treatment of this disease in humans have been developed. In the early 19th century, two French scientists, Calmette and Guerin, developed BCG- Bacille Calmette Guerin vaccine which is a preventive measure against tuberculosis. With BCG, the incidence of tuberculosis is reduced by as much as 80%, and the degree of protection will last for many years.

WHO's recommended approach for treating tuberculosis is DOTS (Directly Observed Treatment Short course) and a major campaign run by WHO's global TB programme is actively promoting its use. Yet, worldwide, only some 10% of TB patients are receiving DOTS, and in Africa only 23% of TB patients are estimated to receive DOTS overall (Paul, 1997).

Despite the discovery of the infectious agent of TB almost a hundred and twenty years ago and with all the break-through in prevention and treatment, and the still continuing efforts to improve diagnosis and treatment of TB, the prevalence of the disease is increasing worldwide. This is because a large number of TB patients present themselves first at the traditional healers' place, and if at all they are present at any health facility, they present late. It is therefore, important to note that 75% of Africa's populations (Tella, 1980) live in the rural areas, and they have great faith in traditional medicine because it takes account of their particular socio-cultural backgrounds, hence, they tend to go to the traditional healers for treatment of the disease conditions which they should ordinarily have brought to the hospital.

The rationale behind this study is to be able to improve the TB referral system, such that these patients who present themselves to the traditional healers first can be referred to health facilities nearest to them so that they are treated and cured early instead of presenting after complications might have set in.

The objectives of this study was to determine the characteristics of the traditional healers and the verification of their practice; to collect information about their knowledge on the symptoms, causes and management of TB, including their perceptions and attitude toward orthodox management of TB; to make recommendations on how the traditional healers can receive adequate health education on TB; to enhance identification of cases for prompt referral to health facilities (that is, improving the referral system).

MATERIALS AND METHODS

Background to study: The community

Remo North Local Government Area was created in December, 4th 1996 out of the old Ikenne Local Government Area. The local government area is located in the rain forest region of Southwestern Nigeria and is bounded in the west by Obafemi/Owode Local Government Area, in the North by Oyo State, in the South by Ikenne Local Government Area, and in the East by Ijebu-North Local Government Area.

The inhabitants are Remos and few settlers from Igbo, Igede and Hausa tribes. The estimated population of the local government area is about 59, 157. The population distribution is 60% urban and 40% rural. Under the local government area are major towns like Isara, Ode Remo, Ipara, Ilara, Akaka and numerous villages. Majority of the people within the local government area are poor with few rich ones and middle class. They engage in farming and trading with few artisans viz; motor mechanics, photographers, panel beaters, welders, radio technicians and tailors. They grow the usual food and cash crops within the rainforest vegetation of Nigeria for example, cocoa, oil palm produce, kolanuts, cassava, maize, cocoyam, cowpea, plantain, oranges, etc. They also engage in animal production- poultry, fishery, pigs, snails and rabbit rearing.

The people are mostly Christians, Muslims and Traditionalists with seven Obas as the heads. The level of literacy is average. The staple foods of the local government area include Ebiripo, Ikokore, Eba, Fufu, and Iyan.

There are 8 health clinics, one General Hospital and many private health institutions within the local government area. Also, there are 21 primary schools, 9 secondary schools, and 2 tertiary institutions within the local government area. There are 3 commercial banks and a recreational facility. There is NITEL (Nigeria Telecommunications) and NIPOST within the local government area. Visual and audio-visual aids are common among the people both in the rural and urban areas of the local government. The electric power supply from NEPA (National Electric Power Authority) is below average, thus discouraging establishment of industries in the area.

The transportation system within the villages is poor but there is an express road which links the major towns within the local government area. Access roads to the villages are rough and crooked, and the main means of transportation are motorcycles and bicycles.

For water supply, bore holes and deep wells are constructed by the government, non-governmental organizations and individuals in the local government area. There is no pipe-borne water supply to the area.

Consent was taken from the local government area office at Isara, and the traditional healers were pointed out by the local government officials by virtue of the fact that they live within the local government area.

With the aid of a pre-tested semi-structured interview questionnaire, 30 traditional healers in Remo North local government identified by their certificate of apprenticeship, a descriptive and cross-sectional study was carried out to assess their knowledge in the symptoms of TB, their perceptions, beliefs and their practices as regards the management of TB.

The study design was descriptive, and information was collected from the traditional healers using interviewer-administered questionnaires; and they were interviewed as seen. The questionnaire used in this study was a semi-structured.

RESULTS AND DISCUSSION

A total of 30 traditional healers were involved in the study. Twenty-eight (93.3%) of the respondents were males and 2 (6.7%) were females. The age group, 70 to 79 years constitute the largest group accounting for 30.0% of the respondents. The distribution of the

Table 1. Distribution of respondents by age and sex.

Age (years)	Sex		Total (%)
	No. of males (%)	No. of females (%)	
20-29	1 (3.3)	0 (0.0)	1 (3.3)
30-39	5 (16.7)	0 (0.0)	5 (16.7)
40-49	4 (13.3)	0 (0.0)	4 (13.3)
50-59	2 (6.7)	0 (0.0)	2 (6.7)
60-69	5 (16.7)	2 (6.7)	7 (23.3)
70-79	9 (30.0)	0 (0.0)	9 (30.0)
80-89	1 (3.3)	0 (0.0)	1 (3.3)
90-99	0 (0.0)	0 (0.0)	0 (0.0)
>100	1 (3.3)	0 (0.0)	1 (3.3)
Total	28 (93.3)	2 (6.7)	30 (100.0)

respondents by educational status were as follows, 12 (40.0%) had no education, 4 (13.3%) did not complete primary education, 5 (16.7%) completed primary education, 2(6.7%) did not complete secondary education. Four (13.3%) completed secondary education while 3 (10.0%) had post secondary education.

By religion, 11(36.7%) were Christians, 10 (33.3%) were Muslims while 9 (30.0%) were traditionalists. 60.0% of the respondent traditional healers understand tuberculosis to be a disease associated with cough, weight loss and chest pain'.

By the mode of spread of tuberculosis, 11(36.7%) believed that tuberculosis can be spread by the oral route, 2 (6.7%) responded that it runs in families (familial), 5 (16.7%) sharing of foamites, witchcraft 2 (6.7%), while 10 (33.3%) had no idea of the mode of spread. The majority of the traditional healers fall in the age group 70 to 79 years and are males, while the females who are the minority are found in the age-group 60 to 69 years (Table 1). This is to show that this is a male-dominated profession. And for the age group 20 to 29 years and those of 80 years and above are not well represented probably because the traditional healers in older age groups are dying off and the younger ones are yet to be trained or still under training.

A large percentage (40.0%) of the traditional healers are not educated, 16.7% of them completed primary school, 13.3% did not complete primary school, and another 13.3% completed secondary school, 10.0% of them had post-secondary school education and the remaining 6.7% did not complete secondary school.

Many of these traditional healers are either Muslims, Christians or Traditionalists, with the Christians accounting for 36.7% of the respondents, the Muslims 33.3% and the Traditionalists accounted for 30.0%. The World Health Organization Expert Committee defines a traditional healer as (that) person who is recognized by the community in which he lives as competent to provide health care using vegetable, animal, and mineral substances and certain methods based on the social, cultural and religious backgrounds as well as knowledge, attitudes and beliefs that are prevalent in the community regarding physical, mental and social well-being and the causation of disease and disability. (WHO, 1978; (Erinosho, 1998).

Indigenous native healers are variously known as *Babalawo, Onisegun and Adahunse* among the Yoruba. The knowledge base for the practice of medicine of these healers derives mainly from their traditional world-view, myths and beliefs, including healing techniques which have been handed over the centuries from one generation to another. Some healers are merely diviners while others combine this skill with the use of their extensive knowledge of medicinal herbs (Erinosho, 1998). Past studies have indicated the numerical strength of these healers, suggesting that they are preponderant. In a report, Ademuwagun (1969) claimed that close to 10% of rural and 4% of urban dwellers are traditional healers. His assertion concerning their numerical strength clearly indicates that they are greater in number than formally trained cosmopolitan western-style physicians and that they are, as such, more readily accessible to the general populace than the latter (Erinosho, 1998). It is not surprising therefore, that tuberculosis patients approach them in view of their easy accessibility in the community. It is therefore important that these traditional healers are conversant with the signs and symptoms of this deadly common communicable disease which scientists have proved curable by orthodox methods. The traditional healers can contribute immensely to the control of this preventable communicable disease by the early recognition and prompt referral to DOTS centres for appropriate management to ensure adequate control of the disease.

It is estimated that one-third of the world's population is infected by *M. tuberculosis* and that 8 million new cases of active TB and 2.6 to 2.9 million TB related deaths occur each year (Mugerwa, 1998). In areas of high tuberculosis incidence, the disease is primarily a disease of young adults. Epidemiological factors associated with

Table 2. Distribution of the respondents by causes of tuberculosis (aetiology).

Responses	Frequency	Percent (%)
Unnatural (Witchcraft and mystical causes, no idea)	16	53.3
Familial	5	16.7
Infectious, contact with TB patients	2	6.7
Poisons, eating forbidden food	5	16.7
Alcohol and cigarette smoking	2	6.7
Total	30	100.0

Table 3. Distribution of respondents by their methods of preventing tuberculosis.

Responses	Frequency		Total (%)
	Yes (%)	No (%)	
Immunization of children with BCG	11 (36.7)	19 (63.3)	30 (100.0)
Discourage over-crowding around patient	14 (46.7)	16 (53.3)	30 (100.0)
Improve ventilation	8 (26.7)	22 (73.3)	30 (100.0)
Taking patient with prolonged cough to hospital for treatment	7 (23.3)	23 (76.7)	30 (100.0)

TB are age, poverty, overcrowding, poor living conditions, urban living, and malnutrition. Famines have also been associated with soaring TB mortality rates. Also, HIV/AIDS infection is also associated with TB (Warren and Mahmoud, 1985).

The profound immuno-suppression resulting from HIV infection confers the greatest risk known for reactivation of latent TB infection and for progression of recent TB infection to active TB. The immune suppression caused by HIV facilitates the multiplication and spread of mycobacterium leading to progressive disease. This will lead to spread of both drug-sensitive and drug-resistant mycobacterium through nosochromial contact. Thus, from a public health stand point, TB is the most serious and life threatening complication of AIDS, because of the potential to spread disease in both HIV and non-HIV infect.

The manifestations of tuberculosis obtained from this study were cough, weight loss and chest pain. This agrees with the work of Youmans (1976) who wrote that if pleuritic involvement accompanies the primary infection or the primary infection becomes progressive, localizing symptoms of cough, chest pain and subsequent increase in fever may be observed. He then went further to write that weight loss and night sweats are some of the manifestations which are more common than all the localizing symptoms except cough.

The aetiology of tuberculosis as obtained from these traditional healers interviewed included witchcraft and mystical causes, poisons and forbidden foods and familial causes as shown in Table 2. Only 2 (6.7%) of the respondents correctly mentioned that it is caused by an infective agent. In 1882 Robert Koch discovered that the tubercle bacillus, *M. tuberculosis* is the infective agent of the disease.

Twenty (66.7%) of the traditional healers agreed that tuberculosis is found in both cities and rural areas. This agrees with the works of Youmans (1976) and that of Warren and Mahmoud (1985). Youmans found that most TB is found in those areas of the cities where there is overpopulation, overcrowding and lower standards of personal hygiene and sanitation. Mahmoud and Warren reported that TB is widely distributed in rural areas.

In terms of the prevention of the disease, a large percentage of the traditional healers do not believe that the BCG vaccine can protect against TB (as outlined in Table 3). This disagrees with the report by Warren and Mahmoud that BCG vaccination against TB has helped to reduce the incidence of TB by as much as 80%. This study also showed that by discouraging overcrowding around patients and improving ventilation, the spread of TB cannot be prevented; this does not compare with the work of Ruck (1997) that overcrowding and poor living conditions are some of the epidemiological factors of TB.

Twenty-one (70%) of the traditional healers treat TB by administering herbal concoction to TB patients (as highlighted in Table 4). This is inconsistent with the WHO recommended treatment for TB which is DOTS-Directly Observed Treatment Short course. Just 10% of the respondents refer patients to the hospital.

From this study, recurrent TB is claimed to be due to non-compliance to herbal concoction on the part of the patients this is presented in Table 5. This disagrees with the studies carried out that recurrent TB (which could be in form of reactivated old TB or re-infection) is due to non-compliance to anti-TB drugs, and lowered immunity against infection.

Twenty-two (73.3%) of the traditional healers treat recurrent TB by the administration of herbal concoction as recorded in Table 6. This is not in line with the WHO

Table 4. Distribution of respondents by their methods of management of tuberculosis.

Responses	Frequency	Percent (%)
Herbal concoction	21	70.0
Recite incantations	1	3.3
Refer to Hospital	3	10.0
Others	5	16.7
Total	30	100.0

Table 5. Distribution of respondents by causes of recurrent tuberculosis.

Responses	Frequency	Percent (%)
No idea	21	70.0
Poor diet and strenuous work	1	3.3
Witchcraft	1	3.3
Non-compliance with herbal medication	6	20.0
Cigarette smoking and alcohol	1	3.3
Total	30	100.0

Table 6. Distribution of respondents by management of recurrent tuberculosis.

Responses	Frequency	Percent (%)
Herbal concoction	22	73.3
Refer to hospital for treatment	3	10.0
Others		16.7
Total	30	100.0

recommended use of anti-tuberculosis drugs under a re-treatment regimen. All what is required is prompt referral to the appropriate DOTS centres.

Intensive tuberculosis health education should be extended to traditional healers. Government through public health institutions should mobilize health educators and organize workshops to educate the traditional healers about TB. The referral system should be improved- that is, via these organized workshops. The traditional healers need to be conversant with early signs and symptoms of TB for early referral to the appropriate health institutions.

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