

The Perception of Illness in Traditional Africa and the Development of Traditional Medical Practice

Akpomuvie. Orhioghene. Benedict¹

Abstract

The central theme of this paper is that all societies have health-care systems which consist of beliefs, customs, specialist and techniques aimed at ensuring health and diagnosing, preventing and curing illness. The author argued that African indigenous medicine which was neglected for a long time is brought into focus as its demand for the treatment of diseases has become so high in contemporary times. The shortcoming of western medical practices, the incidence of fake drugs and quacks has spurred a resurgence of interest in African traditional medicine and practice. Apart from the re-orientation of the social value system of the African society from the prevalent interest in foreign products and technology, the author suggested a reorganization of the curriculum of our medical schools to incorporate the positive elements of traditional medicine and practice.

Keywords: Epidemic, transgression, Harmony, ethno- medical, practice, manipulation, heritage, transformation, utilization, therapy, co-recognition, etc.

Introduction

Cross-cultural research showed that perception of good and bad health, along with health threats and problems are culturally constructed. Different ethnic groups and cultures recognize different illnesses, symptoms and causes and have developed different health-care systems and treatment strategies. According to Cohen and Armeagos (1984); Inhorn and Brown (1990) diseases also varies among cultures. Because of the small numbers of traditional and ancient foragers, mobility and relative isolation from other groups, our ancestors lacked most of the epidemic infectious diseases that affected agrarian and urban societies.

The Africans recognized that the air we breathe, the water we drink and the food we eat, are all swarming with millions of micro-organisms called germs but contended that if germs cause diseases in relation to their population, the whole human race together with the animal and vegetable kingdoms would have been exterminated long before now (Aja, 1999). In addition, Aja stated that since the germ theory has failed to account for some diseases, some of the factors that can cause diseases are sorcery, breach of taboo, spirit intrusion, diseased objects, ghosts of the dead and acts of the gods. In fact, the causes of diseases are due mainly to transgression of natural laws as expounded in traditional African metaphysics. These laws are constantly violated in ignorance and sometime deliberately. The African believes that there is inherent ontological harmony in the created universe and any attempt to upset the harmony, constitutes a diseased state. The attempt could be human or non human, hence a disease could be physical or metaphysical. In traditional medicine, attempt is therefore made to look for both the physical and metaphysical causes of decease, hence the traditional healers appealed to both scientific and metaphysical means in an attempt to achieve a comprehensive cure of any malady.

¹ PhD, Sociology Department, Delta State University, Abraka, Nigeria. E-mail: bakpomuvie@gmail.com

Disease - Theory Systems

The kind and incidence of disease vary among societies and cultures interpret and treat illness differently. Standards for sick and healthy bodies are cultural constructions that vary in time and space (Martin 1992).

Still, all societies have what Foster and Anderson (1978) called “disease-theory system” to identify, classify and explain illness. According to Foster and Anderson (1978), there are three basic theories about the causes of illness; personalistic, naturalistic and emotionalistic. Personalistic disease theories blame illness on agents (often malicious) such as sorcerers, witches, ghosts or ancestral spirits while the Naturalistic disease theories explain illness in impersonal terms. One example is Western medicine or bio-medicine which aims to link illness to scientifically demonstrated agents that bear no personal malice toward their victims. Thus, Western medicine attributes illness to organisms (e.g. bacteria, viruses, fungi or parasites), accidents or toxic materials. Other naturalistic ethnomedical systems blame poor health on unbalanced body fluids. People believe their health suffer when they eat or drink hot or cold substances together or under inappropriate conditions. Emotional disease theories assume that emotional experiences cause illness.

Illness and Illness Behaviour

According to Mechanic (1968), the term illness is used in two ways by analysts who study issues concerning health and illness and stated that it refers to a limited scientific concept or to any condition that causes or might usefully cause an individual to concern his or herself with its symptoms and seek for help. For Smith (1998), the perception by a person that he or she is not well as well as illness, are subjective sensations which may have physical or psychological causes and concluded that, illness is also sometimes used as a synonym for disease or disorder.

Ubrurhe (2000) however stressed that the definition of disease is fraught with many difficulties consequent on the standpoint and purpose of its usage. Rothschild sees it as a subject or clinical/social need for help, which is based on a loss of tuned cooperation of physical, psychic or psychophysical functional elements of the organism. And argues that in the disease, there is a functional disturbance where harmony is replaced by contradiction and cooperation by discordance. The symptoms were due to the change or extinguishing of the regulatory processes in quantity or quality. Diseases in the words of Idler (1979) is an abstract biological-medical conception of pathological abnormalities in peoples' bodies. This is indicated by certain abnormal signs and symptoms which can be observed, measured, recorded, classified and analyzed according to clinical standards of normality (Mechanic 1968; Coe-Rodney, 1970). In the same token, chronic ailment may also be responded to differently by people of different social status and age. The aged might perceive ailment at old age as normal in the same way as mild ill-health is accepted as a normal part of life even when it has biological underpinnings and consequently not induced illness behaviour amongst many groups of people in society (Coke and Owumi, 1996).

Similarly, Idler (1979) sees illness as the human experience of disease which is social. This state is indicated by personal feelings of pain, discomfort and so on and may lead to behavioural changes. These changes may or may not preclude objective disease reality but rooted within a social context. The above contention is succinctly contextualised by Low (1982) thus; that illness is given socially recognizable meanings. That is, they are made into symptoms and socially significant outcome and consequently, adequate classification on causation and therapy are designed within the socio-cultural context for its management. Read (1966) observed that in African systems, there are three groups of illness: trivial or everyday complaints treated by home remedies, European disease-that is disease that respond to western scientific therapy and African disease-those not likely to be understood or treated successfully by western medicine.

This observation according to Oke and Owumi (1996) is true of many ethnic groups in Nigeria. Erinoshio (1976) and Oke (1995) working among Yorubas and Owumi (1989) among the Okpe people of Delta State noted that illness etiology could be traced to three basic factors, viz: natural, supernatural and mystical. Illness is not only a personal affair, it also arouse a wide variety of feelings in the sick person and in those close to him as they engage in a search for treatment, which becomes an immediate problem (Onu 1999).

For the patient according to Onu (1999), a serious illness carries with it the underlying fear of death or permanent disability and constitutes a crisis which requires cooperative efforts both from family members and from health care providers (physical or spiritual). Maclean (1979) observed that there are many ways in which reactions to illness resemble one another in societies which otherwise seem widely dissimilar. Maclean further alluded to the fact that regardless of the demonstrate greater pharmacological efficacy of one form of therapy than another, merely to embark upon a treatment regime which is acceptable to all one's relative and friends, supplies the satisfaction which comes from social conformity, Scholars such as Gluckman (1966), Evans Pritchard (1937) and Marwick (1965) who have written extensively about African society, agree that belief systems as part of the structural components are causally related to illness. On the other hand illness behaviour as distinct from health behaviour according to Oke and Owumi (1996) and Mechanic (1968) refers to how illness is evaluated, perceived and acted upon by people who experienced discomfort and pains.

It is also the consciousness of the state of health and effort made to relieve one of the associated discomfort and pains experienced. The utility of these concepts of disease and illness are considered in the light of the social determinants of health services utilization and health status evaluation within a cultural context. Diseases and illness are eventualities that are ubiquitous among members of social groups. For example in developing societies where the level of disease is comparatively high, one finds that diseases and their stern implications are important objects of concern and discussion. Since disease is a recurring phenomenon toxic which poses problems to people, they have explicit beliefs about its causes and mechanisms. When viewed in their totality, these medical beliefs constitute a layman's view about diseases. Such a view is used by medical practitioners and the lay populace to explain occurrence of disease and also to validate treatment (Fabrega 1978).

Traditional Medical Technology and Practice

As with food technology, our forefathers had evolved their own medical technology before the coming of the "white man" (Arab and Europeans). According to Andah (1992) from very early times, our folks have used plants as curatives and palliatives for various ailments. The successful treatments became formalized, sometimes with prescriptions of correct methods of preparation and dosage. In addition, Andah stated that the ingredients and the manner of preparation vary with the ailment but the significant point is that in many cases, patients were cured of their physical or psychological ailments. Generally speaking, our traditional healers apply methods which are similar everywhere, however, the plants used and the therapeutic values attributed to them, are also dependent on various factors. Some of these factors are geographical, sociological and economic that surpassed ethnic, national and political boundaries.

Speaking on African drug therapy, Onu (1999) averred that the basis of Africa's medical heritage which is reflected in indigenous medical practice is founded on rational and coherent body of knowledge relating to various diseases and ailments as well as their remedies. Indigenous medical technology in Africa to Onu, has not only developed drugs and surgical skills for fighting ailments but also replete with reputable body of knowledge for the training of specialists in the healing of various diseases and disorders of various complications. Similarly, Simons (1957) contended that medical practice in Africa had developed since antiquity to the stage of setting bones, trepanning, healing mental disorders and even conducting seemingly complicated operations like those of the caesarean section.

As a result of the above, a fair picture of indigenous medical practice in Africa must invariably be a picture of specialists trained in their own way, in the acquisition of an impressive wealth of knowledge around herbs and other materials of therapeutic value. It cannot be over-emphasized that their training was not only vast but exact. It was thought that through inspiration, observation and experiments involving trial and error margins, the medical value of the plant kingdom, minerals and certain animals could have been gradually realized and exploited in relation to specific ailments and cures (Mume, 1973).

Vegetable medicine is so prominent in Africa that a distinct class of practitioners has emerged in the control of this aspect of medicine. Their control is reputable since it arises from a thorough knowledge of the medicinal properties of plants and the pharmaceutical steps necessary in turning such plants into drugs. Apart from herbal substances, minerals such as (clay, salt, stone) and many other substances have been used in various proportions as raw materials in indigenous pharmaceutical practice; a practice that has served as a viable base for African medical heritage. Reflecting on the state of African drugless therapy, Onu (1999) stressed that drugless therapy in Africa is the most interesting, because this is the area where African medical practice has been most misunderstood. He noted that the characteristic hypocrisy that goes with such misunderstanding, is that African medicine has been passed as not only ineffective but as a primitive phenomenon; flourishing on ignorance and prelogical climate of thought. This misunderstanding regroups at best on sentiments and at worst on issues not relevant to healing disease as far as the African worldview is concerned. If this misunderstanding was a non-issue, one begins to wonder why it still persists even in enlightened circles. Onu (1999) however concluded that it can be argued that it persists because of two unresolved controversies in medical practice. The controversy over the causes of diseases and that arising from the fact that indigenous medical practice in Africa is yet to articulate meticulous models of explaining many sensitive aspects of its drugless therapy.

Still on therapy, Ubrurhe (2003) drew attention to the Izon ethnic-group whose environment does not permit the growth of many herbs and as an alternative, specialize in “massaging”. According to him, this therapeutic system has been employed for the treatment of ailments of the nervous, muscular and osseous systems as well as treating gynecological problems. The whole armamentarium of the masseur is the physical manipulation of the muscles, joints and veins on the nude skin in a technical manner. In most cases, massage treatment may be applied to relax the muscles and veins as well as to allow circulation of blood. Ubrurhe however, concluded that the therapeutic method has spread to the contiguous neighbours of the Izon; the Urhobo, Isoko and Itsekiri.

On hydrotherapy, Ubrurhe (2003) further contended that its curative value is realized by both the practitioner and those who have gone through such treatment and their curative effect has been discovered of late by scientists. By equalizing the circulation of the blood in all the systems of the body, hydrotherapy aids in increasing muscular tone and nerve force, improving nutrition and digestion; thereby increasing the activity of the respiratory glands. Hydrotherapy facilitates the elimination of broken down tissue cells and poisonous matters and other noxious issues which impinge on the proper functioning of the body system. Hydrotherapy involves the use of cold, hot, compressed and steamed vapour baths. Cold and hot baths are used for the treatment of different diseases after the addition of some herbs. The fusion is then used for fever, headache, rheumatism and general pains. The hot bath not only makes the skin capillaries to relax but also increases the activity of the sweat glands. It has been observed that water increases the consumption of oxygen to about 75% while about 85% of the carbon dioxide in the body is eliminated through the use and consumption of water.

Apart from dwelling on fasting as a therapy, Ubrurhe (2003) spoke extensively on cupping or blood-letting as a therapy. According to him, this form of therapy is widely used in Africa particularly Nigeria. It is the method of abstracting impure blood by the use of the abstraction cups or horns.

In Africa, especially in Northern Nigeria, the horn has been used for blood-letting and has been regarded as an effective treatment for rheumatism as well as other morbid condition of the blood. In surgery, traditional medical practitioners in Africa are adepts in the performance of intricate operation to remove bullets and poisonous arrows from wounded traditional fighters. They operated on the belly to extricate noxious tissues which caused unnecessary disturbances and stitched together by technical application of pieces of calabash on the operated part while the sore gradually heals. And there are traditional anesthetic drugs which are applied to the operated centre to subdue the pains partially or completely before the performance of the operation.

Sofowora (1982) also observed that in traditional medicine, burns are treated with herbal preparations, which produced a soothing effect. For example, in cases of superficial burns, ointments prepared from papaya juice are applied by Ayurveda practitioners to produce a gradual removal of dead tissue. When this process is complete and the healthy granulation tissue appears, the burn is treated with a herbal medication specially prepared to promote healing (Udupa, 1975). On bone setting, Sofowora (1982) further observed that bone setting is a specialized section of traditional medicine and although it is usually performed without the aid of X-rays, the experienced traditional bone setter, uses his hands and fingers to feel and assess the type and extent of the damage to a broken bone. In the case of a broken leg, the patient is made to lie down or sit down with the fractured leg lying flat. Herbal dressings are placed on the fracture before planks or sticks are tied round the leg with string or the stem of a climbing plant. The patient is required to keep the leg as stationary as possible throughout the treatment.

Many traditional medical practitioners are good psychotherapists, proficient in faith healing (spiritual healing), apituitic occultism, circumcision of the male and female, tribal marks, treatment of snake bites, treatment of whitlow, removal of tuberculosis lymphadenitis in the neck, cutting the umbilical cord, piercing ear lobes, removal of the uvula (urulectomy), extracting a carious tooth, trephination (trepanation), abdominal surgery, preventive medicine and so on. As far back as 1884, Dr. R.W. Felkin had observed a Caesarean section among the Banyero people. Imperato (1977) reported that the patient was first narcotized with herbal preparations. The bleeding vessels were cauterized with red-hot iron rods. Blood was then drained from the abdominal cavity before the uterus was cut open and the baby and placenta carefully removed. This incision in the uterus was then sutured using iron spikes to which strings made from the bark of a tree were attached. The wound was then covered with herbal pastes, a hot banana leaf and finally a cloth bandage. The operation was well developed in areas in and around the present Uganda (Davies, 1965).

Traditional Medical Practice and Development

In our traditional civilizations, the healer occupied a special place within the community. However, Andah (1992) observed that these civilizations have been ravaged in recent times by incessant warfare, slave trade, colonization and now, by European technical development combined with the social phenomena created by independence. As a result, they have all, except in the remotest areas, lost their originality. Thus one is actually searching for the vestiges. Nigeria and indeed black Africa have been witnessing the gradual disappearance of professional healers as well as a decline of their knowledge.

Okaba and Atemie (1997) in their comparative discourse on the orthodox and indigenous medical practices of the peoples of Africa, however, disagreed and emphasized that indigenous medicine which was neglected for a long time is now brought into focus as its demand for the treatment of some ailments has become so high in contemporary time. They further stated that the shortcoming of the western style of medical practices, no doubt, has also helped in the resurgence of African indigenous medicine. For Okaba and Atemie, the issue of integrating both practices has become so critical and thus, raises a fundamental question of what should be the pattern of integration and the mechanism for controlling the emergent system.

These scholars further contended that a proper understanding of the socio-cultural context under which both practices operate requires a thorough examination of the structure and cultural changes inherent in African health care institutions.

The above position is further echoed by Lambo (1970) thus: if our national perspectives have been supporting the cause of medical herbalism in the country, many lives and thousands of pounds would have been saved. The less we are dependent on our medical field, the more we will gain international recognition. We continue to preach this, not because we are willing to boost herbal profession but because we want our government to realize that there is much to gain from herbal drugs and thus put to an end the scandalous waste of thousands of pounds spent yearly on importing foreign drugs, many of which do not agree with our blood. For a proper utilization of our indigenous medical traditions in our technological development, several things are required. One needs to find out, first, what these traditions are; how they affect the individual with regard to the medical systems presently accessible; how the present societal adjustments have modified and are modifying these systems and what role the sociological background of each ethnic group plays vis-à-vis the problems of maintenance of the stability or transformation of these medical systems (Andah 1992).

A great exponent of traditional medical science in Nigeria, Mume, has succinctly pointed out the fact that, contrary to popular thinking, our traditional medicine is often based on very close observation of nature and a real capacity for understanding empirical relations. Our traditional medicine men are often knowledgeable about parts of plants or animals, in particular, the human body and of organic and inorganic substances which have in them characteristics corresponding to what the Western man may call the properties of matter. Examples are properties of herbs, knowledge of application of water, heat and sun therapies. The sap of special plants is known to have purgative qualities, the heart of some animals such as that of the lion and the leopard is known to have fortifying properties. The traditional doctors also have the ability to heal psychological ailments through administering guilt confessions and judicious fasting. They also cure blood diseases and nervous disorders through the extraction of impure blood.

From the foregoing viewpoints, can traditional medical practice in Africa cope with the challenges of today's health problems? Can it successfully ward off the mounting opposition against its substance? Are the African governments and rulers sufficiently informed about the uses of indigenous medical practice?.

Towards Developing Traditional Medicine and Practice in Africa

Perhaps the greatest gain to be made in integrating traditional and orthodox systems of medicine into the official health care system of a developing nation, is that the increase in manpower, would help to provide total health coverage for all (WHO, 1978) as well as meeting the challenges of today's health problems (Akpomuvie 2011). This is because, after integration, some training of traditional medical practitioner (as well as legal control of his practice) must follow. Primary health care at least, would then be available to the whole population. Integration however, faces several problems and these have been well outlined by the World Health Organization.

In considering integration of the two systems of medicine, the following possible alternatives should be borne in mind. Countries considering integration of the two systems probably at present have a situation where official recognition is given to modern medicine but traditional medicine and its practitioners are merely tolerated. As Sofowora (1982) rightly stressed, developing countries should consider adopting either;

- Integration of the two systems into the officially recognized health service and the training of health practitioners in both systems of medicine (the closest example, is in China); or

- The practicing of the two systems in parallel and the independent training of their practitioners in recognized institutions at all levels. The population is then given the choice of consulting practitioners of either types of medicine, since both have a legal right to deliver healthcare. An example of this type of integration is found in India.

If indigenous medical technology and practice must have headway in today's healthcare services, we must resist the temptation of unwholesome importation of all kinds of resources from abroad. We in the developing countries must mobilize our people to work for and accept the rigours of self-reliance, where the people believe in making emphasis on the utilization of the available resources to the fullest allows items of cultural heritage with popular folk roots not only to survive but also to thrive (Sofowora, 1982). Where there is sufficient motivation for this to be achieved, the Chinese system has many advantages and is to be preferred. The historical background of this integration in China emphasized the role of the political leadership which Africa as a continent currently lack; and the problem that will arise in trying to achieve this almost ideal situation in other countries.

The Indian style of integration or co-recognition should be the aim of countries where statist leaders are absent or where the socio-economic climate demands it. This will involve provision of colleges, research institutes, traditional medical councils and hospitals dealing specifically with the traditional systems of healthcare et cetera. The legal recognition of traditional medicine as an official method of healthcare and the provision of the facilities outlined above will help to elevate the traditional medicine practitioner to the position of respect.

Similarly, the WHO (1978) contended that the integration of these two systems of medicine in whatever form, will involve a public pronouncement by the government based on political policy decisions, modification of professional attitudes and public enlightenment campaigns to guide and shape public sentiments towards changes in the existing pattern. Sofowora (1982) noted that in considering the socio-cultural situation in Nigeria, for example, where some elite consult traditional practitioners in secret but boast of using modern medicine, the Indian system would perhaps be the best option. He stressed that Nigeria is run by a presidential system of parliament with many political parties represented in the Senate, the House of Representatives and Houses of Assemblies of the States in the Federation; therefore, the legalization of traditional medicine could be quickly implemented in Nigeria if the Indian system of co-recognition is aimed at.

Establishment of research institutes could be another practical way of developing indigenous medical technology and practice. The law setting up such institute for medical research should specify the functions of such institute to include; 'To carry out and promote the carrying out of research into the various aspects of local traditional medical practices and for the purpose of facilitating the development as well as application of herbal medicine (Mishiu, 1980). Sofowora (1981) also spelt out actions that would need to be taken by any nation aiming at co-recognition of both traditional and modern medicine where only modern medicine is recognized at present;

- An autonomous division for traditional medicine is needed in existing Ministry of Health.
- A law setting up a Council of Traditional Medicine should be enacted. Such a Council should consist essentially of traditional medical practitioners of repute, pharmacists and doctors. The traditional medical practitioners to serve on the Council should be picked so as to represent various specializations in the profession rather than the representation of associations of traditional practitioners. The traditional medical practitioners on such a Council should be men of demonstrable ability in their profession.
- The following duties would need to be carried out, perhaps by separate task forces; registration of traditional medical practitioners, training of traditional medical practitioners, registration of traditional medicine clinics or premises and laws and regulations of practice and code of conduct.

- A National Institute of Traditional Medicine would need to be established by law in each country considering co-recognition of traditional and modern medicine. Such an Institute would be the equivalent of the National Medical Research Council which many developing countries already have. Such an Institute should be set on clear-cut objectives to meet the national needs.

Conclusion and Recommendation

The re-orientation of the social value system of the African society from the current large-scale appetite for foreign products and technology to a culturally and environmentally suitable technology is the most viable option towards sustainable technology. This will be quite similar to the Chinese method of relying on the old and traditional methods (Aziz, 1978). It is necessary to reorganize the curriculum of our medical schools to incorporate the positive basic elements of the practice of traditional medicine. As a second immediate practical step, our medical students as indeed students in many other fields of applied science are required to undergo direct traineeship of one or two years in our rural communities, under the supervision of their teachers. They are expected in the process to study the world and problems of traditional experts and where possible, actively cooperating with them to bring about a better health-care delivery systems for our people.

The present situation where traditional medicine has little or no place in the curriculum of our medical schools and where the relationship between the two medical practices is one of open hostility and gross ignorance, each of the other, is at best unhealthy for meaningful progress in our health care system. It can probably best be remedied at the medical school stage where, in fact, the prejudice is planted in the first place.

While health care is an important matter not to be treated lightly, the role already being played by traditional medical practitioners in the rural areas in health care, should be given due consideration. At the same time however, the need to evaluate traditional healing practices should be emphasized with a view to noting procedures which need to be eliminated or modified so that the traditional medicine practitioners' contribution to health care can be improved upon.

References

- Aja, E. (1999). *Metaphysics and Medicine; The Traditional African Experience*, in Okpoko A.I. (ed). *Africa's Indigenous Technology*. Ibadan: Wisdom Publishers Limited.
- Akpomuvie, O.B. (2011), "The Role of Traditional Skills and Techniques in the Development of Modern Science and Technology in Africa". *International Journal of Humanities and Social Sciences*. 1 (13):178-186.
- Andah, B.,W. (1992), *Nigeria's Indigenous Technology*. Ibadan: Ibadan University Press
- Atieme, J.D. and Okaba, B.O. (1997) , *Socio-Cultural Context of Western and Indigenous Medical Practices in Africa*. Port Harcourt; Osia Int'I Print and Publishing Ltd.
- Aziz, S. (1978) , *Rural Development: Learning from China*. London; Macmillan Press Ltd.
- Cottah, C.P. (2000), *Cultural Anthology USA*: McGraw-Hill Companies.
- Erinosho et al (1985), *Traditional Medicine in Nigeria: A Study Prepared for the Federal Ministry of Health Lagos Nigeria*.
- Erinosho, A.O. (2012), *Health Sociology for Universities, Colleges and Health related Institutions*. Abuja: Bulwark Consult.
- Fadahunsi, A. (1986), *The Development Process and Technology; A case for a Resource based Development Strategy in Nigeria*, Research Report No. 77.
- Igbuzor, O., (2005), *Perspectives on Democracy and Development, Nigeria*: Joe Tolalu and Associates.
- Imperato, P.J. (1977), *African Folk Medicine: Practices and Beliefs of the Bambara and other People*. New York: Baltimore.

- Inhorn, M.C. and Brown, P.J. (1990), *The Anthropology of Infection Disease*, Annual Review of Anthropology 19:89.
- Jegade, A.S. (2010) , *African Culture and Health*. Ibadan: Book Wright Publishers.
- Karaka, M. (2004), *Chinese Herbal Nutritional Supplements and Business Guide*. www.Tianshi.com
- Kirdar, U. (1992), *Change: Threat or Opportunity?* New York: United Nations.
- Koizumi, T. (1994), *Japanese Creativity and Sustainable Development*. Proceedings of the Kyoto Conference on Japanese Studies Vol. 2.
- Mechanic, D. (1960), "The Concept of Illness Behaviour" *Journal of Chronic Disease*, 15;
- Mechanic, D. (1968), *Medical Sociology*. New York: Free Press.
- Mishiu, E.N.(1980), *Personal Communication*.
- Mume, J.O.(1973), *Traditional Medicine in Nigeria*. Warri: Jom Nature Cure Centre.
- Oke, E.A. and Owumi, B.E. (1996). *Readings in Medical Sociology*. Ibadan: Adjacent Press.
- Okpoko, A.I. (1999). *Africa's Indigenous Technology; with particular reference to Nigeria*. Ibadan: Wisdom Publishers Limited.
- Onu, A.O. (1999). "Social Basis of Illness: A Search for Therapeutic Meaning" in Okpoko, A.I. (ed). *Africa's Indigenous Technology*. Ibadan: Wisdom Publishers Ltd.
- Read, M. (1996). *Culture, Health and Disease, Social and Cultural Influences on Health Programmes in Developing Countries*. USA: Tavistock Publishers.
- Smith, T. (1998). *Complete Family Health Encyclopedia*. London: Dorling Kindersley.
- Sofowora, A. (1982). *Medicinal Plants and Traditional Medicine in Africa*. New York: John Wiley and Sons Limited.
- Sofowora, A. (1981). "Problems and Prospects of Integrating Traditional and Western Medicine in Nigeria". *Nigerian Journal of Pharmacy*, 12 (1): 279-283.
- Ubrurhe, J.O. (2003). *Urhobo Traditional Medicine*. Ibadan: Spectrum Books Limited.
- W.H.O. (1978). *The Promotion and Development of Traditional Medicine Technical Report*. No. 622, Geneva.
- World Commission on Environment and Development (1987). *Our Common Future*. New York: Oxford University Press.