

African Traditional Medicine: Practice and Prospects

By

AYODELE TELLA

Department of Pharmacology, College of Medicine of the University of Lagos, Lagos - Nigeria.

Summary

Today there is increasing awareness of the value of traditional medicine particularly in the African context. It is a system of medicine that has played and will continue to play a major role in the development of modern orthodox medicine. The facilities of Orthodox medicine are proving unable to reach large masses of the population in the rural areas where, fortunately, the practice of traditional medicine abounds. Therefore, for a more realistic and effective development of a health care delivery system, the two systems of medicine ought to be blended.

Traditional medicine is based on its own philosophy of health and disease. Three types of supernatural forces - witchcraft, spirits and gods are said to be responsible for harmful effects on human beings. The traditional healer consequently provides health care taking into consideration not only the physical cause of a disease but also the socio-cultural background of his patient.

The various branches of traditional medicine include herbal medicine, therapeutic fasting and dieting, hydrotherapy, radiant heat therapy, venesection, simple surgery and bone-setting, spinal manipulation and massage, psychotherapy and psychiatry, preventive medicine and therapeutic occultism. Of these, herbal medicine appears to be the most developed, but all the other branches are also important.

Certain aspects of traditional medicine may make integration with orthodox medicine difficult. Nevertheless, with careful governmental planning both at the base and at the summit, a genuine desire for co-operation among all health personnel, traditional healers and the community at large, integration could be achieved.

In all countries of Africa today, there is an ever-increasing awareness of the value of traditional medicine and the necessity for improving its standards. Indeed, the O.A.U. (Organisation of African Unity) has within the last few years, had two international symposia, the first in Dakar in 1968 and the second in Cairo in 1975. These were on a particular aspect of the subject, notably medicinal plants. At the end of each symposium, certain resolutions were passed and participants were enjoined to develop and foster interests in the study and rational exploitation of traditional pharmacopoeia. When taken in comparison with modern orthodox medicine, traditional medicine seem crude and likely to produce very little or no beneficial effects. To most Africans, certainly to the teeming natives of rural Africa, however, traditional medicine has brought incalculable benefits and is sometimes regarded as being superior to orthodox medicine in certain respects.

The literature on Traditional Medicine in all its ramifications is not impressive except for the particular aspect of herbal medicine (Adigboluja, 1946; Oliver, 1960; Watt et al, 1962; Swain, 1972). The other aspects seem

to have received very little attention. Thompson (1966) for instance merely touches on areas of Therapeutic Occultism and Mune (1975) provides only a sketchy, though valuable contribution on a wider sphere of Traditional Medicine. In the present studies, more information was obtained by personal consultations with a number of Traditional Healers who were kind enough to disclose their knowledge or rather some of it.

Traditional Medicine is a method of healing founded on its own concept of health and disease. Knowledge is passed on usually orally, very rarely in writing, from father who is a Traditional Healer, to son frequently on the former's death-bed. Unfortunately, the son may die before the father, or the father may die in unexpected circumstances especially since the time and conditions of death are absolutely unpredictable. Consequently, a good deal of valuable information must have been lost and is probably still being lost, in this way. The reason for the rather peculiar manner of communicating information is that the healing knowledge involved is jealously guarded and rigidly kept as secrets within certain families. Besides, the knowledge represents the traditional healer's only means of livelihood which may be lost once the knowledge is made available to almost everyone by presenting it in writing instead of orally, to selected individuals. Further, it is believed that the knowledge can be used for the benefit of man as well as for his destruction. Consequently, outsiders especially those who might use it for wicked purposes must be excluded from sharing in it.

Traditional Medicine is broadly in two divisions namely the physical and the metaphysical. The Physical division uses vegetable, animal and mineral substances. The vegetable substances could be parts of plants such as roots, stem, leaves, seeds, flowers or bark or a combination of any of these. The animals used include, snails, chameleon, snakes, tortoises, rats, and lizards. Among the mineral substances employed are crude antimony, sulphur and chalk. The metaphysical division is concerned with the invisible world. Prayers, invocations or incantations are offered to some mysterious but apparently powerful forces. In the treatment of diseases either division is used alone, or in combination one with the other. The practice of traditional medicine embraces a number of forms of treatment such as Herbal Medicine, Therapeutic Fasting and Dieting Hydrotherapy, Radiant Heat Therapy, Venesection, Surgery and Bone-setting, spinal Manipulation and Massage, Psychotherapy, Therapeutic Occultism, Psychiatry and Preventive Medicine. These are practiced singly or in combination. A practitioner very rarely engages in all aspects of traditional medicine. He usually excels in one or more and practices these to the exclusion of the others. Each of these forms of treatment will now be examined in some detail.

Herbal Medicine:

The medicinal plants which may be leaves, stems, roots, flowers, seeds, fruits or any combination of these parts, are made into decoctions invariably by boiling with

water. The decoction is then taken by patients orally or applied topically or used as a hot bath. Sometimes small whole animals or parts of animals or minerals are added to make various concoctions. At other times, the ingredients of a concoction are incinerated together and the resulting powder taken in measured quantities with water or other drinks or rubbed into scarifications on the skin. Another way of preparation is to make an infusion of herbs in cold water. The infusion like the decoction, is administered orally or topically, with the exception that it is not usually used for a bath. In some cases alcohol, from locally made beer or gin or from imported hard liquor is employed to extract active principles from these vegetable and animal materials. The alcoholic solution or tincture is then used for the treatment or prevention of diseases. In addition, medicated soap is employed. The soap is prepared from local materials and herbs in a ground-up or powdered form are mixed with it. Such medicated soap is often used in skin conditions for bathing the whole body or the parts affected.

Therapeutic Fasting and Dieting:

Generally from one to three days of fasting is recommended for such diverse ailments as cold, catarrh, diarrhoea, constipation and gonorrhoeal infection. It is not usually prolonged beyond three days at a stretch. During the fast, there must be complete abstinence from solid food, water may however be drunk. If it is necessary to repeat the fast, it is first broken for about two or three days and then repeated until the patient improves. If there is no improvement, fasting is abandoned.

In therapeutic dieting, light liquid or semi liquid food with plenty of fruits and water are recommended, e.g. for constipation. With colds and catarrh, little or no water should be drunk and chilled food and drinks should be avoided.

Hydrotherapy:

Cold, lukewarm or hot water is used with or without the addition of herbs to bath the patient. The beneficial effects are said to include a feeling of tranquility and increased cardiovascular performance manifested by improvement in heart function and blood circulation. The body is also cleansed at the same time. Compresses in the form of cold or hot packs, are applied to the affected parts of the body often to reduce inflammation arising from trauma, bruises and boils. Steam or vapour from a boiling decoction or boiling water which may contain herbs having volatile principles, is inhaled by the patient. In this connection, the patient may sit astride a vessel containing the hot liquid from which steam is issuing. He then covers himself and the vessel with a blanket or a suitable thick cloth. This treatment which is rather like sitting inside a hot tent, is reputed to be particularly good for respiratory tract infections.

Radiant Heat Therapy:

An open coal fire is placed under a raised platform on which the patient is made to lie. The fire is removed when he gets unbearably hot and replaced when he is able to endure some more heat. It is suggested that the radiant heat so directed to the patient frees him for example from the inflammation and pyrexia which follow fractured bones.

Venesection:

The main types of instruments used are a locally prepared knife, a specially made cup called an abstraction

cup, and, the horn of a small animal open at both ends called an abstraction horn. Small cuts are made with a knife usually on the back of the patient just below and median to the inferior angle of the scapula. The abstraction cup is placed over the cuts in such a way that the rim of the cup makes an air-tight fit with the skin and blood is then forced into the cup. When the abstraction horn is used, one end is placed on the skin to cover the cuts and the other end is placed in the mouth of the traditional healer who sucks through it until the desired amount of blood is removed. At the same time, hot compresses are usually applied near the cuts. Venesection is said to be valuable in the treatment of septicaemia and rheumatism.

Surgery and Bone-setting:

Use is made of specially prepared knives, abstraction horns and cups for the purpose of blood-letting as described above. The same knife is also used for circumcision. This operation consist in removing part of the prepuce which is the foreskin covering the penis in the male child, and the cap of the clitoris in the female child. Juice from cassava leaves and the snail's body fluid are used as local anticoagulants to stop the bleeding. Circumcision is believed to ensure that the child when he or she grows up, has a clean healthy sex life. Another use to which the surgeon puts the knife is in the making of tribal marks on the face of the child; the pattern and number of the marks would depend on the particular linguistic group. This is however a practice that is dying out. Boils when 'ripe' are incised with the knife before being pressed out. Uvulectomy is performed with a type scissors which is also locally made. In this operation, the patient is first given a herbal sedative by mouth, after which the conical projection from the edge of the soft palate is cut off. Uvulectomy is believed to prevent uvulitis and the hoarseness or complete loss of speech which accompanies uvula inflammation.

In bone-setting, a highly remarkable degree of competence is to be noted especially as there are no radiographical aids. A fall from a tree or other accidents occasioning bone fractures, which may be simple, compound, complicated or of other types are dealt with in many cases, successfully. The wound is thoroughly cleaned, the bones are set, care being taken to ensure that the ends will unite; bleeding is stopped often with cassava leaves or the snail's body fluid; banana leaves are used as lint, wooden splints are applied and banana stem fibre is used as bandage. The patient is then subjected to the radiant heat treatment earlier described. Sometimes, just before starting treatment, a chicken is selected and one of its legs is deliberately broken. The fracture is then treated **pari passu** with that of the patient. The claim is that the patient is healed when the chicken is able to use that leg normally again.

Spinal Manipulation and Massage:

Spinal manipulation is used for such ailments as slipped discs or displaced spinal bones and other conditions. The patient is stripped to the waist and placed on a clean hard surface, often a mat on the floor. He lies there flat on his ventral side with arms extended and the big toes touching. The traditional healer with the help of an assistant, places a fairly heavy wooden pole about 4-5 feet long on the patient's back. The pole is then rolled with gentle pressure up and down his spine from the shoulders to the buttocks.

Massage is also a form of manipulation but of the muscles of the body rather than the bones. The patient stripped completely naked, lies on a hard bed and the traditional healer using his bare fingers and hands, methodically manipulates the muscles of the patient's body. Body massage is claimed to be beneficial in a number of chronic diseases.

Psychotherapy:

This plays a great role in the practice of the traditional healer but it is rarely used alone. It is founded on the principle that the mind is responsible, at least in part, for a patient's illness and the removal of this illness is partly dependent on creating a favourable influence on the mind. The traditional healer uses mental suggestions and other simple psychological methods to banish worry, fear and anxiety. The patient is thus given a bright mental outlook and the healing process of whatever ails him is greatly accelerated.

Therapeutic Occultism:

This branch of Traditional Medicine has been termed "witch doctoring" and its practitioners called "witch doctors" disparagingly and in a derogatory sense by those who ought to know better. Occultism belongs to the realm of the mysterious in which the Traditional Healer deals with unseen but apparently powerful supernatural forces. It involves prayers or incantations or invocations to these forces. Indeed, the belief is still current among indigenous Africans that certain diseases are caused by supernatural means and that against these, orthodox medicine is powerless—only therapeutic occultism could effect a cure. The practitioner often has extensive extra-sensory perception. For example, he is clairvoyant and can send out and receive telepathic messages. He is also capable of doing conscious astral travelling. It is claimed that certain plants and other substances have occult powers which could be harnessed for good or for ill. Most practitioners specializing in this branch of Traditional Medicine have sworn to use their powers and knowledge for curative and preventive treatment only.

Among them are also to be found diviners who consult oracles, spirit guides or friendly spirits in their divinations using such aids as burning incense, cowrie shells, kolanuts, white sand, sacred carvings, sacred animals and seeds of certain plants. In this way they are able to diagnose a disease and work out its manner of treatment. They are usually men of advancing years with considerable experience and versed in metaphysics or parapsychology. As noted above, Therapeutic Occultism, because of the mystery surrounding it and its external paraphernalia, has been described rather contemptuously as witch doctoring. Many Africans now know a little better and for the majority, it is still a very potent force in health and disease, capable of achieving successes where orthodox modern medicine may fail.

Psychiatry:

This practice consists mainly in the treatment of maniacs. They are restrained with iron chains or with wooden shackles clamped on their hands and feet. They are then given herbal hypnotics which send them into a profound sleep. Violent maniacs after being restrained are severely caned before the administration of the hypnotic. The number of strokes of the cane depends on how long it takes to subdue the patient. It is supposed that the basis of the caning is that violence met with violence must give way to tranquility. This treatment is

also claimed to be effective if the mania is due to demoniacal possession.

Preventive Medicine:

Medicated rings, amulets, waist bands and necklaces are worn as charms or "talismans" with the object of keeping at arms-length from the wearer, infections and other diseases. The charm must be worn very close to the skin. The ingredients of the medicinal preparations in a charm are dictated often by therapeutic occultism.

These then are the medical practices that have existed from time immemorial. They were slowed down and in certain places, some were halted completely, by the advent of European influence in Africa. There can be no doubt that they are fore-runners of modern orthodox medicine. In fact, some of the practices still feature in other currently employed systems of medical treatment such as Nature, Faith, and Spiritual-Healing, Osteopathy, Chiropractic and Homoeopathic medicine.

Of the various branches of Traditional Medicine, herbal medicine seems the most developed. As earlier mentioned, it is engaging the attention of many laboratories and research groups in all parts of Africa at the moment. One or two of the highlights of these research activities will now be discussed.

Firstly, knowledge about medicinal plants did not arise by chance nor by processes invariably beyond our five senses to explain. It was obtained primarily by observations on animals and later, on indigenous natives. For instance, snakes suffer from impaired vision and are almost blind after hibernation. In this state, they seek out *Foeniculum vulgare*, a member of the Class Umbelliferae popularly called the **Fennel plant**. They pass some of it over their eyes and eat some and they promptly have their sight restored. **Fennel** juice has since been used to improve the vision of patients (Dymock et al., 1891). Again, some natives of India were observed to use *Rauwolfia serpentina* in the treatment of insanity (Sen and Bose, 1931). This plant belongs to the Class Apocynaceae and its extract reserpine, is now used clinically as a major tranquilizer and in the treatment of hypertension. The South American Indians on their part, were observed to use *Cinchona* of the class Rubiaceae in treating their fevers (Jaramillo-Arango, 1950). Extracts of *Cinchona*, quinine and quinidine which are the active principles, are now used clinically as an antimalarial and a cardiac depressant respectively. The list is a long one; suffice it to say that other plants or their extracts e.g. digoxin and atropine, that now represent the mainstay of modern orthodox therapeutics were discovered in somewhat similar manner. Further observations and searches along these lines cannot but be very rewarding.

Investigations concerning potency or therapeutic values are also advancing the frontiers of our knowledge about these plants. Factors involved are to be found in the soil conditions, the environment generally, the age of the plant, its stage of development and the time of day or year it is collected. Thus, *Cinchona* grown in a hot moist climate above sea-level contains more quinine, the antimalarial drug, than one grown in a maritime area. Indeed the latter's bark could be devoid of quinine completely. *Digitalis* which is a member of the class, Scrophulariaceae, is very potent in the treatment for example, of congestive heart failure. When the plant is collected in the early morning, it has much reduced cardiotonic effect, and is less potent, than when it is collected

in the late afternoon after considerable exposure to sunlight. Sunlight has been consistently shown to increase the cardiac glycosides contents of this plant. Further studies could also lead to the discovery of other but as yet hidden therapeutic properties of a number of plants each of which at present has a settled place in the treatment of a particular disease. For example the deccrative plant, rose perinwinkle, *Vinca rosea*, is claimed to be effective in sugar diabetes or diabetes mellitus. Investigations of the plant in comparatively recent times has shown that it is also effective in the treatment of cancer (Noble, et. al., 1958). Mention too must be made of the fact that most of these medicinal plants are removed from the continent of Africa by the Kilogram every year for a small sum and are later returned as finished drug preparations for which very high prices are charged. It is obvious therefore that investigations must continue in order to produce optimum yields of active principles from our medicinal plants, discover their full potentials and reduce economic loses.

In these days of terategenicity or drug-induced malformation of the unborn child, iatrogenic or drug-induced diseases, drug addiction and, other toxic reactions caused by modern synthetic drugs (Schimmel, 1963, Martin, 1971), it cannot be denied that search for preparations with less serious or no undesirable side-effects must continue or be intensified. Herbal preparations offer great promise because their ingredients develop in association with life and given proper study, they may prove in the long run, less toxic than synthetic drugs. Besides, most herbal preparations retain the life-giving vitamins, food minerals and other micronutrients contained in the original plant ingredients. These valuable substances cannot be supplied by a single synthetic drug, rather one must resort to polypharmacy (Martin, 1971) with its potential dangers.

Much therefore still remains to be done. Dosages for instance still need to be rationalized and the methods employed by the practitioners in concocting herbal preparations generally need considerable improvements. For instance, resort is being increasingly made to "bottled" preparations analogous with those of Orthodox Medicine. The aim is to obviate the necessity of making up time-consuming conecions each time they are needed, instead, they would be ready at hand. This bottling process however fails to take account of sterilization procedures. Consequently, from time to time, some of these bottles explode, suddenly and violently because of entrapped microbes and their expired gases which exert mounting pressure on the stopper and the walls of the bottle. Herbalists in particular and traditional healers in general require systematic 'open' training and not the "closed shop" type of training as at present. In this way, their competence can be more readily evaluated and upgraded. The need to study and improve Traditional Medicine should however not be confined to the herbal aspect. Other branches must also be studied and, in depth as far as possible. In so doing, Traditional Medicine would be enabled to make its rightful, dignified and useful contribution to some of today's problems of health care delivery in Africa.

At present the relationship between Orthodox Medicine and Traditional Medicine is one of mutual distrust and in some respects utter contempt one for the other. Orthodox Medicine recognises the fact that Traditional Medicine gave it its birth and infant nurture since for example, drugs such as atropine from the Belladonna plant or reserpine from the *Rauwolfia* plant originally

obtained from herbs but subsequently extracted from these plants and refined, now constitute the mainstay of modern therapeutics. It argues however, that all that happened a long time ago, the old order must change and yield place to new particularly when the 'new' represents a distinct advance on the "old" a good deal of which is crude and detestable. In this connection it points to medicinal preparations of Traditional Medicine containing uncooked animals or their organs, which are administered orally. It argues further that as a consequence, modern man is interested in the rational explanations and the scientific basis of his diseases and their treatment. It is simply unacceptable to ascribe ill-health to obscure mysterious supernatural forces as Traditional Medicine does.

Traditional Medicine on the other hand, concedes that material and intellectual weapons are weightier on the side of Orthodox Medicine and is concerned that the latter might use these weapons to stifle it out of existence completely. It observes that in spite of the remarkable advances of Orthodox Medicine, there are still much about human diseases that the latter has not mastered or understood sufficiently. It illustrates this point by reference to such diseases as sickle cell anaemia which has no know cure in Orthodox Medicine and pernicious anaemia in which the sufferer must take his drug, cyanocobalamin, for life. Traditional Medicine further draws attention to the fact that Orthodox Medicine has introduced serious iatrogenic or drug-induced diseases into man e.g. some forms of cancer, and, phocomelia resulting from defective development of the unborn child. Traditional Medicine also maintains that the belief in the supernatural causes of disease has a genuine and solid foundation. In this regard it points to certain forms of mental illness which are due to demoniacal possession over which Orthodox Medicine is ineffective but which Traditional Medicine has treated successfully. It draws attention also to the fact that certain aspects of Orthodox Medicine are potentially injurious to some rural communities because socio-cultural factors are ignored.

There is no doubt that most of what one says against the other are generally true, sometimes painfully so. Unfortunately, these things are said quite often in a hostile and uncompromising spirit. Is the schism then between the two systems of medicine so wide as to be irreconcilable? Before answering that question it is necessary to consider an elementary analysis of how each system operates.

Orthodox Medicine or modern scientific medicine deals with a diseased state under the following heads: **Aetiology or cause(s)** of a disease.

- Symptoms** which are the disturbances which cause the patient to appreciate that he is unwell
- Signs** which are objective features of the disease appreciated by the trained observer using his senses.
- Pathology** - This is the science of disease processes including nature, causes and development of abnormal conditions.
- Diagnosis** - is the determination of the nature of the disease.
- Treatment** consists of the application of measures to remove or alleviate the effects of the diseased condition.
- Prognosis** is a forecast of the outcome or duration of the disease Traditional Medicine on the other

- hand handles these factors as follows:-
- Aetiology**—This is often ascribed to three supernatural forces -namely witchcraft, spirits and gods.
- Symptoms** Patient describes these in much the same manner as in orthodox medicine.
- Signs**—The experienced Traditional Healer observes these using his native senses. He has no sthetoscope, for instance.
- Pathology**—This is generally absent in the investigations of the Traditional Healer. He lacks the necessary training and facilities.
- Diagnosis**—This is carried out through.

- (i) **Divination** or consultation with oracles or spirit guides using external aids like white sand, cowrie shells, kola nuts, seeds of certain plants, sacred animals or carvings or other objects.
- (ii) Visual examination of eye, skin, urine, faeces, etc.
- (iii) **Taste** e.g. of urine for sugar in diabetes
- (iv) **Use of ants** e.g. these are attracted by the sugar in the urine of the diabetic.
- (v) **Palpation** i.e. examination involving feeling or perceiving by the sense of touch using the palms and the fingers.
- (vi) **Astrology**—The study of the position of stars in the belief that they influence human affairs.
- (vii) Analysis of dreams.

Treatment: as we have seen consists of Medical (i.e. use of vegetable, animal and mineral substances), Therapeutic fasting and dieting, Hydrotherapy, Radiant heat therapy, Venesection or Blood-letting, Surgery and bone-setting, spinal manipulation, Massage, Psychotherapy Therapeutic Occultism, Psychiatry and Preventive Medicine.

Prognosis: usually based on previous experience with a similar disease.

It is obvious from these that there is an identity of concern for the patient and genuine efforts directed towards making him well again. On balance, the primary objectives in both cases are the cure and prevention of disease as well as the maintenance of health. The differences are therefore not so great as to exclude cooperation between the two systems. Furthermore, in Africa at present, the health coverage of Orthodox Medicine is very unsatisfactory in that it reaches only about 15-30% of the population. The remaining 70-85% living mainly in the rural areas, are served by the more readily accessible facilities of Traditional Medicine. The World Health Organisation (WHO) is concerned that a more realistic, efficient and effective development of health care delivery system should be worked out and is now actively engaged in pursuing measures to integrate the two systems of medicine through a WHO Expert Committee on Traditional Medicine which held its first meeting in Brazzaville from 9th-13th February, 1976.

It is clear therefore that the final solution to health problems of the developing countries of Africa is the integration of Traditional Medicine with Orthodox Medicine. In this way, the efficiency of health delivery will greatly increase and the cost to each country will be relatively low.

From what has been said above, it can be seen that the constraints which are preventing integration are due in parts to barriers created by mental attitudes on the part of practitioners on both sides. In order to break down this barrier, there must be continuing meaningful and fruitful dialogue between accredited representatives of both parties with full participation by the country's Government representatives. At present, practitioners of Orthodox Medicine are a highly organised body, those of Traditional Medicine are not. They exist as myriads of small independent groups in almost every corner of their countries in Africa. Government should encourage Traditional Healers to form one Nation-wide Association in their respective countries, sections or units of specialist groups, could however be allowed. In this way Governments can deal with them, assist or use them more effectively. In order to help eliminate quacks and charlatans from among the ranks of Traditional Healers and provide acceptable talking points in any dialogue between Traditional Medicine and Orthodox Medicine, the W.H.O. through its Expert Committee on Traditional Medicine has compiled some criteria and crystalised these into the definitions of Traditional Medicine and Traditional Healer. These definitions are as follows:-

Traditional Medicine— is the totality of all knowledge and practices, used in diagnosis, prevention of disease and restoration of physical, mental or social balance, and which rely exclusively on practical experience and observation handed down mainly verbally from generation to generation.

Traditional Healer— is someone who is recognized by the community in which he lives, as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious background in the community as well as the prevailing knowledge, attitudes and beliefs regarding physical, mental and social well-being and the causation of disease and disability in the community.

It would be more realistic to form a National Committee on Traditional Medicine in each country. The Committee should consist of Government officials, Medical Scientists and accredited representatives of Traditional Healers and Medical Doctors. They should meet regularly and have sub-committees which could meet more frequently. Their first task will be to use the criteria in the definitions above to break down resistance due to mental attitudes on either side. They should also assist Traditional Healers to draw up an acceptable syllabus, if one does not already exist, for students of Traditional Medicine. In so doing, recognised 'professional examinations would be formulated and adopted to mark the state of advance of a student, and the competence of one qualified to practise. The Government must then take appropriate decision followed by a determined action binding on all concerned.

For the practical processes of integration, the initial steps could be at two levels, namely at the base and at the summit of existing health services. At the base

which would be in the rural areas, a central village is selected around which is grouped a number of other villages. A Dispensary or Health Centre is set up in each village, the largest being the one in the centre and to it, all the other villages must report frequently. The team to man each Health Centre should consist of Traditional Healer(s), Traditional Birth Attendant(s) and First-Aid Workers equipped with an elementary medicine-chest. Each team should be supervised from the central village.

The summit of the health services would be located in towns or cities. At the summit, a National Research Centre for Traditional Medicine or a University Department of Traditional Medicine is a necessary requirement. The team in such a Centre or Department must be multi-disciplinary and should consist of Medical Scientists, Traditional Healers, Doctors, Pharmacists, Taxonomists, Sociologists, Psychologists etc. The Laboratory or Department would be very closely linked with at least one large Hospital with facilities for Laboratory Clinical tests. Patient would visit the Centre for consultations and a record of symptoms observed, diagnosis etc, would be kept for each patient. Traditional treatment could then be started. At the end of it, the team working in a spirit of freely accepted co-operation between Traditional and Orthodox Medicine would produce a joint evaluation.

Problems of various kinds will arise from time to time with this arrangement as with any other. These problems may include salaries of Traditional Healers, their hours of work and other conditions of service. Given the desire to make integration work however, such problems can always be resolved to the satisfaction of all. Integration is already working well in China, and, in India as well as Sri Lanka where the form of Indegenous or Traditional Medicine is known as Ayurvedic Medicine. There is therefore no reason why integration should not be started now and made to succeed in Africa.

REFERENCES

- Adigboluja, C.A.I., (1946): "African Family Physician" pp. 96-159 Ola Oluwa Press: Lagos.
- Dymock, W. Warden, O.J.H. and Hooper, D. (1891). Pharmacographia Indica Page 194 Volume II. Kegan Paul, Trench, Triibner & Co. Ltd. London.
- Jaramillo-Arago, J. (1950): The Conquest of Malaria Page 29 William Heinemann: London.
- Martin, E.W. (1971): Hazards of Medication. pp 328-365. J.B. Lippincott Company. Philadelphia.
- Martin, E.W. (1971): Hazards of Medication. Page 384. J.B. Lippincott Company: Philadelphia
- Mume, J.O. (1975) Traditional Medicine in Nigeria pp. 49-78 Jom Centre: Warri.
- Noble, R.L., Beer, C.T. and Cutts, J.H. (1958): Role of Chance Observations in Chemotherapy. Ann. N.Y. Acad. Sci. 76 882-894.
- Olivier, P. (1960): Medicinal Plants of Nigeria. pp. 1-138 Nigerian College of Arts, Science & Technology: Ibadan.
- Schimmel, E.M. (1963): The physician as a Pathogen. J. chron. Dis. 16 1-4.
- Sen, G. and Bose, K.C. (1931): *Rauwolfia serpentina*, a new Indian drug for insanity and high blood pressure. Indian Medical World. 159, 422-428.
- Swain, T. (1972): Plants in the Development of Modern Medicine pp. 5-299 Harv. Univ. Press: Cambridge, Mass.
- Thompson, A. (1966): The Invisible World. pp. 8-68. Tika Tore Press: Lagos.
- Watt, J.M. & Brayer - Brandwyk, M.G. (1962): The Medicinal and Poisonous Plants of Southern and Eastern Africa. pp. 3-1190. Livingstone: Edinburgh.

The Nigerian Journal of Pharmacy is distributed free of charge to all financial members of the Pharmaceutical Society of Nigeria.

Send your current postal address through your Branch Secretariat for regular mails.

Notify any change of address immediately.