

## Chapter 11

# *The HIV/AIDS pandemic, African traditional values and the search for a vaccine in Africa*

*Traditional African values have a lot to offer in an approach towards fighting HIV/AIDS. In this chapter **Godfrey B. Tangwa** argues that values such as empathy and unpaid assistance for those in genuine need will do more to curb the pandemic than the first world's market-driven, profit-oriented practices have done. He also outlines what he believes to be some encouraging research done in Africa towards an AIDS vaccine.*

The response to the AIDS pandemic in Africa should take into account traditional African outlooks and attitudes to commerce and disease. My central claim here is that some of the international responses to the AIDS pandemic probably show the limitations of the 'Western approach' to medical problem-solving. This situation also creates a unique opportunity to re-appraise and re-evaluate traditional African communitarian values, knowledge systems and practices, which, though in danger of being abandoned in preference for borrowed ones, could be of help in the search for a solution to the scourge of AIDS.

What are these 'African outlooks, values and attitudes to commerce and disease'? They are succinctly captured in a remark made by my mother a few years ago, to the effect that medicine and commerce are bad companions (Tangwa 2001: S37). In traditional Africa, curative medicine particularly, but also diagnostic and prophylactic medicine to some extent, were divorced from commerce. The resources of the immediate community were always mobilised on behalf of a seriously ill person and, especially in face of an epidemic, no traditional healer worthy of the name could charge a direct fee for his/her services without being considered a quack or even a con person or losing his/her God-given special skills and endowments (Tangwa 1999a: 277).

Any typical African market, and the system of haggling that goes on there, is highly indicative of an attitude based on a deeply ingrained value system and worldview. In a typical African market, the prices of goods are never fixed. Today there are, of course, modern shops all over Africa, especially in the big cities and urban centres, where the prices of goods and products are fixed. But 'fixed prices' are a borrowed practice in Africa, which has not yet been fully accepted and integrated into the culture and everyday practice. It is not at all uncommon today to witness an African trying to beat down the fixed price of an article in a shop, even in one of the big Western cities, if s/he needs or wants it badly but does not have enough money to pay for it.

In traditional Africa and in any typically African market today, the price quoted to a prospective buyer by a seller usually depends on who the buyer happens to be. In any case, the quoted price is always an invitation for an animated and lively dialogue in which both buyer and seller reveal and learn information about each other and the particular situation and circumstances of the other. (In the last ten years or so, successive batches of my American students from Dickinson College, on a six-month exchange programme here in Yaounde, Cameroon, have found this one of the most difficult aspects of African culture and practices to adapt to or deal with, as can be witnessed from their course essays describing aspects of African culture and practices most at variance, in their opinion, with their expectations or from what obtains in their own country.)

I once witnessed a scene in an African market (the weekly Mbvë Market of Kumbo Town in Cameroon) where, on being told the price of an article, the buyer, without any further ado and without saying anything, immediately removed the amount of money quoted, threw it in front of the seller, took the article and started walking hurriedly away. The seller was sufficiently worried by such behaviour to run after him, give him back his money and retrieve the article, under the pretext that it was, after all, not for sale. The real reason for such a reaction was that he was worried that the buyer may not be a genuine human being and that his money and manner were liable to 'bring misfortune'.

In the course of haggling over an article, the seller and buyer sometimes discover that they are kinsfolk or blood relations, in which case the latter could end up obtaining the said article for free or with a generous addition or other gift. And whenever the product needed is for a patient or is an ingredient for preparing the medicine of a patient, then, more often than not, it is given either free or very cheaply. On the other hand, the situation of the seller and the reason for which s/he is selling the article could cause the buyer voluntarily to pay much more for it than the quoted price. The poverty or otherwise of both buyer and seller as well as his/her situation and need are always a factor to be considered in reaching the final price of any product or article in any typical African market. The same attitude underlies traditional practice within my own natal culture, Nso' culture, whereby it was permissible for anybody to pick fruits fallen from any orchard, no matter to whom the trees belonged, or to harvest enough of a directly edible crop to stem hunger for the moment. As long as you did not climb up the fruit tree or harvest the crop to store or resale (both of which were strictly taboo), you were considered to be well within the narrow bounds of morally permissible action (Tangwa 2000: 13).

The general underlying idea is that no one should die from sheer need or want in a situation where the remedy is readily available. This can be considered as the antithesis of the Western economic idea and practice, now more or less successfully globalised, where the more desperately you need a product or a service, the more you are required to pay for it under the so-called law of demand and supply. For sure, the African traditional practices and the world-

view and attitudes that sustained them had their negative aspects and disadvantages, such as their tendency to encourage complacency and individual laziness, let alone a generally stagnant and unprogressive society. Moreover, they now seem to be receding out of history irretrievably under the combined onslaught of colonialism, modernism and globalisation. Many of the younger generation of Africans have been born, raised and live in the melting pot of urbanised cities and towns with a highly syncretistic culture whose underpinnings are Western influences. Some among this category of modern-day Africans know little or nothing about unadulterated traditional African ways of life and cultural practices.

Nevertheless, the spirit and moral imperatives that imbued some of the traditional African customs and practices could still be salvaged, modernised and even globalised (Tangwa 2001: S37). It would be a good idea to attempt confronting, in a more sustained and systematic way, the antithetical moral intuitions and attitudes of traditional Africa with those of modern Western society, which have been exported and imported or simply imposed all over the globe. This, however, is not the time or place to attempt such a task. My rather modest aim here is to search in the 'junk bag', so to speak, of abandoned or about to be abandoned traditional African values and practices to see whether there may not be elements therein that might be more helpful in the face of the AIDS crisis in Africa than has so far been considered.

Although there are dangers of over-generalising, Western countries seem to place greater emphasis on individual rights (over community needs), libertarian philosophy and market-driven economies. The central importance of commerce in Western thought and practice and the linkage of medicine and health care to the market in the system has its positive side and advantages, such as the very rapid development of medicine in general and of new drugs and treatments in particular. However, it is attended by the understandable tendency of industries and business companies to be driven by morally blind, purely economic logic and the lure of profit. This tendency is often on the lookout for and sees economic opportunities and advantages in even the most distressing of human situations. Such a situation will not be changed by wishful thinking or, under any circumstances, in the short run; many Westerners who are themselves unhappy with this state of affairs are quite powerless to do anything about it. In Africa, where traditional attitudes to both commerce and to disease and treatment suggest an alternative approach, self-reliance initiatives that are supported by genuine humanitarian international help would seem to be the surer way forward against the AIDS epidemic.

### **The African scene**

The lethal nature of the HIV/AIDS pandemic, its causal connection with sexual activity, its non-respect for geographical or cultural boundaries, and its implications for human reproduction, clearly conjure the spectre of the annihilation of

the human species. But, while HIV/AIDS has the poise and posture of a global pandemic, there is no doubt that it is particularly an African problem. According to recent statistics (March 2001), of the 53 million people infected with HIV/AIDS worldwide, about two-thirds are in sub-Saharan Africa. Some of the latest estimates from UNAIDS sources put the number of new HIV infections in 2000 at 5.3 million of which 45 000 occurred in North America, 60 000 in the Caribbean, 150 000 in Latin America, 30 000 in Western Europe, 80 000 in North

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Africa and the Middle East, 500 in Australia and New Zealand, and 3.8 million in sub-Saharan Africa (*Kenya Times*, Vol. 2, No. 32732, Tuesday 5th December 2000). In my own country, Cameroon, the rate of HIV infection amongst the sexually active population has rapidly progressed from 0.5 percent in 1987 to 11 percent in 2000. At the time of writing (May 2001), nearly

a million Cameroonians, including 5 000 infants, out of a population of about 15 million, are HIV positive; 52 000 persons died of AIDS in 1999 alone; 5 168 cases of new infection were recorded in 2000; and 91 000 AIDS orphans are on record.

The HIV/AIDS epidemic has overtaken every other disease as the top killer in Africa, where it has been responsible for an estimated 17 million deaths within a period of less than two decades. And, as Johanna McGeary has so aptly remarked, AIDS in Africa bears little resemblance to the epidemic elsewhere which is usually 'limited to specific high-risk groups and brought under control through intensive education, vigorous political action and expensive drug therapy' (McGeary 2001: 45). In Africa, by contrast, 'the disease has bred a Darwinian perversion. Society's fittest, not its frailest, are the ones who die - adults spirited away, leaving the old and the children behind. You cannot define risk groups: everyone who is sexually active is at risk' (Ibid.).

The HI virus probably found its way from still unknown origins into Cameroon in the late seventies or early eighties. By the late eighties, when the public health authorities first started timidly talking about it, most Cameroonians were still very sceptical about the existence of the virus, some claiming that it was a ploy to discourage sexual activity. Today, scarcely two decades afterwards, there is hardly a Cameroonian amongst 15 million inhabitants who can rightly claim not to have lost a close relative, neighbour, friend or colleague to the AIDS pandemic. And yet there has been little change in the sexual habits of Cameroonians, HIV/AIDS sensitisation campaigns notwithstanding.

### **VANHIVAV in Cameroon**

In the field of research for an AIDS vaccine, one of the commonest current-day moral suspicions is the perception that the West is using Africa and other so-called 'developing world' regions as guinea pigs for research that will, eventually, only benefit Westerners (Benatar 2000, Greco 2000). This could well

be alleviated if Africans could, on a much larger scale than is currently happening in South Africa for instance, become involved not only in assisting, but also conceptualising, initiating and executing this (often very costly) research. The problem is that African initiatives are mostly not taken seriously by the Western world and its large, wealthy, funding institutions, as well as by many African governmental authorities, some of them more preoccupied with personal political survival or with converting public resources into private property. Dictatorship, illegitimate power and corruption are, unfortunately, still the ailments bedevilling power, public authority and governance in many parts of Africa today (Tangwa 1998).

A local initiative in Cameroon, which unlike those of South Africa has not yet received any support, either from the Cameroon government or from any international or national sponsors, is that of Professor Victor Anomah Ngu, an oncologist and former laureate of the Lasker Award for cancer research. Professor Ngu, a former Minister of Health and former Vice-Chancellor of the University of Yaounde, started his research for a vaccine against the HIV/AIDS virus about a decade ago. His seminal hypothesis, published in *Medical Hypotheses* (Ngu 1994; Ngu 1997), is that, being an 'enveloped' virus, the HIV is 'perceived' by the host immune system as 'partly-self' because of the presence of the host cell wall membrane on the viral envelope and that this situation leads to an ineffective response by the body's immune system to the virus. He reasoned that viral core antigens *without the envelope* would be 'perceived' as 'non-self' by the host immune system, thereby eliciting an appropriate and effective immune response. In a normal uninfected person, therefore, such 'unenveloped' core antigens, he claims, would serve as an effective vaccine.

As a non-medical person with more than a passing interest in science and medicine, I found Professor Ngu's hypothesis simple and straightforwardly reasonable, coherent, interesting and well worth serious investigation in the face of the grave threat that is HIV/AIDS. But when he presented his hypothesis and preliminary investigative findings to his medical colleagues (many of them involved by government accreditation in 'the fight against HIV/AIDS') and to appropriate international agencies, with a view to obtaining assistance in systematically testing his hypothesis, he met with only scepticism and even derision. In a letter dated 15 January 1992 the 'Steering Committee on Clinical Research and Drug Development' of the WHO Global Programme on AIDS, in answer to Ngu's application for support, stated, *inter alia*, that they 'felt unable to recommend . . . financial support [because] the methods of antigen preparation and its standardisation were not fully described, and that the study did not have sufficient scientific basis'. But the deadly nature and apparent invincibility of the AIDS epidemic is surely an opportunity to take a hard, unbiased look at all serious efforts at finding a solution, including unconventional ones that may deliberately deviate from or otherwise fall outside of the dominant paradigm. Professor Ngu then proceeded, with meagre personal resources, to demonstrate his claims in sero-positive patients by preparing an *autologous* vaccine for each

of the patients. The results he obtained, even with his rudimentary facilities, clearly seemed to confirm his hypothesis (Ngu 1999).

In September 2000, Professor Ngu and I presented a joint paper at the Fifth World Congress of Bioethics, Imperial College, London, UK, under the title: 'Effective Vaccine against and Immunotherapy of the HIV: Scientific Report and Ethical Considerations from Cameroon' (Ngu and Tangwa 2000). The gist of our joint paper can be summarised in eight points, as follows:

- ◆ The HIV/AIDS is a terrifying and deadly disease, particularly for sub-Saharan Africa, where it has already claimed more than 17 million victims in less than two decades and is poised to wipe out the entire population.
- ◆ The central problem of the HIV infection is that immune responses by the body fail to kill the virus.
- ◆ The reason for this failure is that it is an enveloped virus. The envelope of the HIV is derived from host CD4 cell wall and killing the virus with its envelope will also kill host CD4 cells – leading to an auto-immune disease. The virus has used this threat to blackmail and to block, so to speak, effective immune responses that alone can kill the virus.
- ◆ The ideal solution for the body is to provoke immune responses to the HIV that are without an envelope. Such new immune responses will effectively kill only the virus, sparing the viral envelope and CD4.
- ◆ To obtain such new effective immune responses in an uninfected person, one starts with HIV antigens from which the envelope has been destroyed beforehand. Such antigens, which cannot infect, constitute an effective vaccine for the HIV. All HIV antigens, with only the envelope destroyed, constitute an effective HIV vaccine.
- ◆ Being unable to have such a vaccine tested on healthy persons, we tested it on patients, using their own auto-vaccine, under special conditions and have so far obtained results that confirm our hypothesis.
- ◆ This test showed that the auto-vaccine provoked immune responses that kill the virus, confirming its effectiveness as a vaccine. This procedure of using vaccines to induce the killing of the virus in patients constitutes a form of immuno-therapy for the HIV. A vaccine produced on the same basis as the auto-vaccine will be acceptable for trial on the public, because it has proved its worth in patients.
- ◆ Such a vaccine, in a world in which medicine and commerce seem to have become inseparable companions, holds the best hope of stopping the AIDS epidemic, especially in sub-Saharan Africa, because, *inter alia*, it is completely effective, simple and cheap to produce, using traditional as against modern high technology methods, and therefore affordable for the masses, who are highly vulnerable and most affected by the virus. (On the basis of the autologous vaccines he has been preparing for each of his patients, Professor Ngu estimates that, if produced on an industrial scale, a similar vaccine for healthy

persons would not cost more than an equivalent of about US\$0.10 (ten cents) per shot).

Those who listened to our London presentation of what is in effect a candidate vaccine to which the name VANHIVAV has been given, seemed completely taken by surprise. First of all, no one seemed to have entertained the possibility of a 'home-grown' candidate vaccine proposal coming from Africa. What seemed to have been expected were proposals of how Western researchers could carry out ethical and acceptable HIV/AIDS vaccine research in Africa, with or without the collaboration of local scientists. Secondly, surprise was expressed as to why, with the interesting clinical results presented, no Western researchers or funding agencies had shown interest in VANHIVAV.

Since then Professor Ngu has obtained even more convincing results (Ngu 2001) from now being able to measure the viral load, but VANHIVAV has not yet aroused the sort of interest one would expect in the prevailing situation. There are those both at home and abroad who continue to dismiss his work as 'unscientific' without bothering to supply persuasive arguments for this sweeping judgement. (I was present at two recent conferences in Yaounde, given by Professor Ngu, at the Faculty of Medicine and Biomedical Sciences and the *Institut Goethe*, respectively, where some members of the audience still expressed their unsubstantiated scepticism about his optimism regarding his scientific proposals.) Others, while admitting that he may have discovered 'some sort of cure for AIDS, perhaps', seriously contest his claim to have a protocol for an HIV/AIDS candidate vaccine, on the grounds that a vaccine, by definition, is not something you give to a patient (which fulfils the definition of a drug) but rather something you give to a healthy person to prevent infection. This, of course, is trying to dismiss a claim on the basis of a stipulative definition. VANHIVAV is clearly a candidate vaccine with immuno-therapeutic effect, but why should this additional quality exclude it from the category of vaccines? Of course, a vaccine is not normally administered to a patient but rather to a healthy person. But Professor Ngu has not been *vaccinating* HIV/AIDS patients. He does not yet have a vaccine. What he does have is a proposal for making one. His involvement with patients was a way of proving that his hypothesis for a vaccine had scientific merit. The incidental immuno-therapeutic action of such an eventual vaccine, if it can be successfully manufactured, would in no way prevent it from being a vaccine. A boxer who also happens to be a sprinter cannot be said to be any less a boxer on the grounds that boxers are not usually sprinters.

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### **Africa's unequal burden**

While the prospect of the possible annihilation of the entire human race by the HIV/AIDS pandemic is indeed far-fetched, that of erasing the African continent

of its human inhabitants is not too far from the realm of possibility. The reasons for this, which are mutually self-reinforcing, are many and varied and include, *inter alia*, the following:

- ◆ general paucity of modern health care facilities;
- ◆ acute and widespread poverty, exacerbated by war, refugee problems and unemployment;
- ◆ general lack of awareness of the pending AIDS disaster due to illiteracy and resultant difficulties in communication; and
- ◆ cultural attitudes and traditional practices that prevent or subvert recourse to or proper use of effective preventive methods, such as the condom or the bottle in place of breastfeeding.

The relationship between life expectancy and health, on the one hand, and economic growth on the other, indicates that with the AIDS epidemic Africa is caught within a vicious circle from which it will not be easy to bail out. To have the wherewithal to fight adequately against the epidemic, Africa needs to raise its level of production considerably; but those who could help do so – young adults or society's fittest – are the ones dying most from the epidemic.

If we look at global statistics for the distribution of the burden of disease generally in relation to population, the global economy, research resources and actual expenditure on health care, we realise that Africa with over ten percent of the world's population, controls less than one percent of the global economy and is saddled with over 66 percent of HIV/AIDS infections. Furthermore, over 90 percent of global research resources are devoted to diseases causing only 10 percent of the global burden of disease, while 87 percent of global health care expenditure is lavished on only 10 percent of the global population (Benatar 2000: 664 and Benatar and Singer 2000: 824). Above all else, industrialised world pharmaceutical companies, which control the manufacture of modern drugs, are demonstrably interested in making profits and maintaining monopolies and only secondarily in any other matter. As commercial enterprises, multinational corporations cannot be blamed for pursuing profit as such. The question, however, is whether the nature of the catastrophe in Africa does not require imaginative emergency measures, where such profit pursuit can be combined with more morally sensitive global co-operation aimed at helping those in dire need and towards discovering and manufacturing a cheap and affordable vaccine.

The situation of sub-Saharan Africa is indeed critical and such innovative emergency measures are urgently required. Among such putative measures, the search for an effective and affordable vaccine against AIDS occupies pride of place. What the experience of the last two decades in sub-Saharan Africa has demonstrated is that:

- ◆ education and sensitisation, while valuable and necessary in their own right, are of limited effect against the HIV/AIDS epidemic until such time as the general level of literacy in the African population is raised considerably; in

the short term, given the levels of illiteracy in the adult population of even the most developed sub-Saharan African country (South Africa), viz. 41 per cent, this does not seem very likely;

- ◆ therapies, such as AZT or Niverapine, which may prevent mother-to-child infection or palliate and prolong the life of AIDS patients, seem not to be generally accessible or affordable given the way they are currently priced. Imaginative measures, which necessitate global co-operation, as suggested in the previous paragraph, are required to make such drugs available and affordable, at least for the purpose of drastically reducing vertical transmission;
- ◆ it is not easy for people to suddenly change their behaviour, attitudes, customs or sexual habits.

Furthermore, it is instructive to note that all the major viral epidemics of the past – smallpox, poliomyelitis, yellow fever, cholera, measles etc. – were eliminated or controlled mainly by the use of vaccines. As the co-ordinator of South Africa's Aids Vaccine Initiative (SAAVI), Walter Prozesky is often quoted to have observed: 'Never in history has a viral disease been controlled by drugs. That's why a vaccine is the only possible way to fight HIV' (Galloway 1999: 10). In sub-Saharan Africa in particular, an effective cheap vaccine against HIV/AIDS clearly seems to be the only realistic and the most imperative of goals in the fight against the disease.

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## **A possible strategy**

From the African perspective, the Western approach to the AIDS pandemic, like many other things Western, is overly empirical, statistical and business-like. It is a question whether all problems that face us, including HIV/AIDS, can be solved by a purely analytical method where the base-line approach is to try to reduce complex systems to constituent parts, and where treatment of the parts of necessity implies salvage for the whole. This business-like statistical analyticity may, from some perspectives, appear like the epitome of rationality, but it ignores other perspectives and other aspects of being alive and being human. The analytic paradigm of knowledge is, without doubt, very important and is perhaps the most important kind of knowledge – prevalent to varying degrees in all human cultures – but it is not the only one. There are other types of human knowledge such as the intuitive, the metaphoric, the parabolic, the mythic, etc., which are, more or less, much better developed and more prominent in non-Western cultures.

In Africa a new movement is slowly emerging in which 'indigenous knowledge systems' are being researched, explored and, if possible, revitalised.

Research into indigenous knowledge systems, for instance, has recently been identified as one of the focal or preference areas for research that will be funded by the National Research Foundation, the officially government-sponsored endowment for scientific research in South Africa. In Cameroon, Professor Fabien Eboussi Boulaga and myself have lately been collaborating with Ulrich Loelke, a young German philosopher, in designing a research project based on a comparison of scientific knowledge and indigenous African knowledge systems. Many Africans see exciting possibilities in this reconstruction of traditional modes of knowledge and traditional approaches to problem-solving. Of course, the outcome of this research cannot be predicted and it can therefore not be said with any certainty in advance whether it will yield completely new knowledge systems or only elements that may complement and strengthen the existing dominant one.

The point is: globalisation should not be allowed to fix analytic knowledge as the sole paradigm of knowledge because there are aspects of reality and human life and existence with which that paradigm, important though it certainly is, cannot adequately deal. In any case, the HIV/AIDS epidemic in Africa is not one that will be easily solved by the present over-emphasis on study, statistical collection and analysis of data. It is not simply knowledge about how many people are being infected with HIV every second or how many children are dying from AIDS every minute that will turn the situation around. In African attitudes and expectations, when people are ill they want to be helped, not studied and analysed, and when people know that there is no cure for their illness, they quietly accept their fate with courage and hope.

The dilemmas confronting African countries and the international community in the face of the HIV/AIDS pandemic might be put in the following parable, whose interpretation, in accordance with African practice (Tangwa 1999: 218–219), I leave open for the reader. Suppose that you are very poor and almost starving. You are eating the last few rotting yams left in your barn. In this situation it would be highly morally commendable if you were to offer some of your rotting yams to a neighbour who is equally starving but whose barn is already completely empty. But, suppose that I, your third neighbour, have a barn full of yams from which I regularly select rotting yams to throw away. I now select my rotting yams and, instead of throwing them away, I offer them to you, cheaply or even freely. You will surely be very grateful and there is no doubt that my action is beneficial to you, in some sense. But is my action morally worthy or commendable?

We should be very careful not to confuse commerce or economic considerations in general, important as they may be in their appropriate context, with the ethics of health care or HIV/AIDS vaccine research in particular. Ethics is not about self-interest, not about bargaining, not about realism of the present moment but about what *ought* to be done in a given situation. It is also about sympathising and empathising with fellow humans *in need*, doing unto them as we ourselves would be done by if our respective situations were reversed, treating them as ends in themselves and never as mere means to any other end and, above all, doing them no harm (*primum non nocere!*). What ought to be done in

the face of the AIDS pandemic evidently has not yet been done. An epidemic of the calibre of HIV/AIDS is not the ideal occasion for commercial bargaining, for calculation of profits and losses; it is not the ideal occasion for interminable wrangling, for scoring points or for opportunism of any sort; it is, first and foremost, the time to mobilise all available resources in the interest of those helplessly in need; it is the occasion to save lives without prior calculations or probing questions. Ethics is also about 'loving' one's neighbour and being unable to sleep with a quiet conscience should s/he happen to die of an ailment whose remedy or part thereof is locked up in one's cupboard.

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