Tackling Malaria the DDT Way

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Over 99% of Nigerians living in Nigeria have malaria parasites living in their liver. The malaria parasites will emerge from the liver into the blood stream when the immune defences against malaria are low. It is from the blood stream that malaria causes fever and end-organ effects such as muscle pains, cerebral malaria with convulsions, anaemia and kidney failure.

These effects lead to absenteeism from school and work, avoidance of resorts, economic loss, poverty and death. Malaria is no respecter of persons. It kills politicians and academics, civil servants and self-employed, the rich and the poor, young and old. Some of our foreign European visitors have returned home only to suffer from malaria and die.

In children under the age of 5 years, immunity against malaria has not yet fully developed; in pregnant women immunity is reduced; in other adults stressful situations such as influenza, HIV/Aids, TB and other illnesses, reduce the immunity; prolonged absence from malarious areas lead to loss of immunity; increased infestations from fresh mosquito bites lead later to hyper-parasitaemia.

It is now clear why children under the age of 5 and pregnant women bear the greatest death risk from malaria. In women, malaria fever or inappropriate treatment of malaria causes abortion, which can be quite devastating to the sub-fertile couple or women who marry later in life.

In the years of survival-of-the-fittest, our sturdy forefathers developed immunity and survived malaria attacks. In our villages today, many old people of over seventy years have malaria parasites in their blood but have no ill-effects because they have developed immunity to the disease. Most of the treatment for malaria in those days consisted of raising body temperature with herbal stream baths till the fever "broke" or of taking various herbs some of which are useful till today.

Because of other influences, our population today does not have the high level of immunity of our forebears. Earlier this year, the Federal Ministry of Health announced that the age-old chloroquine was no longer as effective against malaria as it used to be; that chloroquine should no longer be used as first-line treatment for malaria. The recommended alternative to chloroquine as first line treatment is ACT-based combination drugs.

It is claimed that the use of such combination drugs for treatment of malaria and the use of pyrethroid treated bed nets for prevention would reduce the mortality from

malaria. This claim has not been proved yet. It is to be noted that because nobody lives under the net all the time insecticide treated bed nets do not prevent malaria; all they do is to reduce the high level of parasitaemia which is responsible for the severer forms of malaria that lead to death.

Kidney failure is caused by allergy to the malaria parasite not heavy parasitaemia; so insecticide treated bed nets do not prevent this type of death. It follows that even if everybody uses ITNs, there will still be deaths from malaria. Since, net or no net, people still suffer from malaria, many of the nets supplied are lying waste in stores and back rooms.

Apart from the expensive nature of ACT-based combination drugs, their toxicity to fetuses and the drain on our foreign reserves, the real danger is that resistance to ACT-drugs will come faster than to chloroquine. As for the nets, we should separate the business of selling nets from the effectiveness of treated nets in battling malaria.

It clearly behoves us to develop a long term strategy aimed at eradicating malaria before those disadvantages overwhelm us. Unless we do this right now, a time will come, sooner than later, when we will be unable to control malaria because the options for treatment and prevention will become shorter and shorter.

No war against malaria can be successful without malaria vector control. Indoor residual spraying of DDT has been established to be the safe, tested, cheap, sustainable weapon against mosquitoes. Contrary to popular belief, it is agricultural use of DDT that is banned by the United Nations. Malaria control use of DDT is permitted by the United Nations.

Eighteen African Countries already have the permission of the United Nations to use DDT to eradicate or at least reduce the incidence of malaria to the barest minimum. These countries are Algeria, Cameroon, Ivory Coast, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Morocco, South Africa, Sudan, Swaziland, Togo, Uganda, Tanzania, Zambia and Zimbabwe. The absence of Nigeria from this list should be a matter for concern for Nigerians.

Nobody disputes the fact that pyrethroid insecticides are some 10-20 times dearer than DDT. The ACT-based combination drugs are more than 30 times dearer than chloroquine. We are therefore spending 10-30 times more money on treating or attempting to prevent malaria than necessary. Most of these drugs or nets are imported from China or India. Yet the irony of it is that both China and India have the permission of the United Nations to produce DDT.

So, heads or tails, we are draining our foreign reserves without any long term benefit to our health or economy or image. The South African war against malaria, which

includes the use of DDT, has been described by WHO as, "the best malaria policy in the southern hemisphere." I recommend that Nigeria adopts the same policy and not fall prey to the propaganda and financial pressures of environmentalists and Donor Agencies whose donations have not in fact improved our malaria status.

The method we are using now is doomed to failure. Our compliance with the dictates of Donor Agencies and environmentalists not to use DDT amounts to suicide or at least menticide of our people. With so many African countries using DDT, Nigeria, the giant of Africa, cannot afford to be the Lilliputian of Africa in things that matter. We should opt out of the financial dictatorships of Donor Agencies just as South Africa has done. Indeed, as the giant of Africa, Nigeria should persuade the African Union to adopt the wide-spread use of DDT as an AU policy.

Until neighbouring countries effectively fight malaria, it can never be fully eradicated. I believe that if the whole of Africa decides as a policy to use DDT, Donor Agencies will be under moral pressure to support the policy.

The undeniable defence for the use of DDT is that it has been demonstrated to save lives and killed none. Nearly all the claimed dangers of DDT are from laboratory experiments. For over fifty years DDT has not been shown in any peer review journal to have caused the death of any body. DDT is safe.

Contrariwise, pyrethroids are known to be toxic to children. Nets treated with pyrethroids must not enter the mouths of children under the nets. A measurable, achievable attack on poverty is to get rid of malaria, which has been established as a quintessential cause of poverty. The help from the G8 countries to fight poverty may more profitably begin with the fight against malaria.

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