

# Nigeria Wins War Against Guinea Worm

Millions of Nigerians may be spared future suffering as the Carter Center announces it has stopped the transmission of Guinea worm disease in the country

By ARUKAINO UMUKORO

As at 1988/89, Nigeria was the most guinea worm-endemic country in the world. It recorded over 650,000 cases in all parts of the country. Statistics also showed that in the mid-1990s, Guinea worm infections in parts of the heavily populated South-east region of the country caused an estimated N3 billion in lost income to rice farmers alone. However, by November 2008, two decades later, incidence of the disease had been reduced by more than 99 per cent, with 38 indigenous cases reported. All the cases were contained. In November 2009, with 12 consecutive months of zero cases, Nigeria appeared determined to finally put a halt to guinea worm transmission.

Nigeria's remarkable achievements in this regard have been attributed to the role played by the Carter Center's Guinea Worm Eradication Programme, which has saved thousands of lives in Nigeria from suffering from the devastating disease. At the Carter Center's Awards Ceremony for Guinea Worm Eradication, which held in Atlanta, United States, US, recently, Nigeria and Republic of Niger were honoured as the 'Most Recent Nations to Halt the Disease Transmission'.

"Nigeria and Niger's recent success halting transmission of this ancient and horrible affliction provides yet another vivid reminder of how people in even the most marginalised circumstances can thrive when given the tools and knowledge to help themselves," said Jimmy Carter, former US president and founder of the centre at the ceremony. Yakubu Gowon, former military head of state, Onyebuchi Chukwu, minister of health and Boubacar Moussa Rilla, Nigerien counsellor, were among the dignitaries at the occasion.

In 1988, the federal government had invited the Carter Center to start Guinea



**Carter and wife, Rosalynn, in Ghana, watch as health workers attend to a child's Guinea worm wound**

worm eradication programme in the country. In collaboration with the Federal Ministry of Health, the centre devised the strategy to eliminate the disease. The strategy consisted of several components, and driven by health education. The goal was to change behaviour and mobilise communities to improve the safety of their local water sources. Approaches introduced to communities included health education and nylon filter distribution; treating stagnant ponds monthly with safe larvicide; direct advocacy with water organisations; and increased efforts to build safer hand-dug wells. The programme also trained and supervised village volunteers to carry out monthly surveillance and interventions.

Nigeria and Republic of Niger both interrupted transmission in late 2008 and have reported zero indigenous cases for more than 12 months, the incubation



**Chukwu: Helps to halt Guinea worm transmission**

period of the parasite. This means that both countries, which also share a border, have joined 14 other nations that have wiped out guinea worm disease since the centre spearheaded the international eradication campaign in 1986, when there were an estimated 3.5 million cases in 20 countries in Africa and Asia.

In 2010 about 1,800 cases of Guinea worm disease were reported, 94 per cent of which were from Southern Sudan and a handful of cases in eastern Mali and western Ethiopia. Ghana is believed to have reported its last case and is expected to make a formal announcement later this year. However, Carter also announced that only (these) three endemic countries (Sudan, Mali and Ethiopia) remain in the fight against Guinea worm disease. "Guinea worm disease is fewer than 1,800 cases away from becoming only the second disease in history (after smallpox) to be wiped from earth," said Carter. "The last cases of any disease are the most challenging to wipe out, especially when stability is threatened in the endemic communities of Southern Sudan and Mali," added Donald Hopkins, vice president of health programmes, Carter Center, and smallpox expert.

At the awards ceremony, the centre presented representatives from both Nigeria and Republic of Niger with handcrafted mahogany and enamel statues representing this historic achievement. Apart from the centre's optimism that guinea worm's elimination will represent empowerment and achievement for the Nigerian people; the country's success at eliminating guinea worm could also serve as an inspiration to other countries still struggling with the disease. "We know that with the international community's support, eradication of Guinea worm disease is not a question of if, but when," emphasised Hopkins.

Guinea worm disease, also known as dracunculiasis, is a debilitating parasitic infection that affects people living in remote, poverty-stricken communities. It is contracted when a person drinks stagnant water that is contaminated with microscopic water fleas carrying infective larvae. Then, the larvae grow for a year inside the person's body, becoming thin one-metre long thread-like worms. These worms create agonisingly painful blisters in the skin through which they slowly exit the body, preventing the victim from carrying out normal activities. There are no vaccines or medicines to prevent or treat the disease.