

Ebola vaccine trial provides high protection against disease



An experimental Ebola vaccine was highly protective against the deadly virus in a major trial in Guinea, according to results published in *The Lancet*. The vaccine is the first to prevent infection from one of the most lethal known pathogens, and the findings add weight to early trial results published in 2015.

The vaccine, called rVSV-ZEBOV, was studied in a trial involving 11 841 people in Guinea during 2015. Among the 5837 people who received the vaccine, no Ebola cases were recorded 10 days or more after vaccination. In comparison, there were 23 cases 10 days or more after vaccination among those who did not receive the vaccine.

The World Health Organization (WHO), together with Guinea's Ministry of Health, Médecins Sans Frontières and the Norwegian Institute of Public Health, led the trial in collaboration with other international partners.

'While these compelling results come too late for those who lost their lives during West Africa's Ebola epidemic, they show that when the next Ebola outbreak hits, we will not be defenceless,' said Dr Marie-Paule Kieny, WHO's Assistant Director-General for Health Systems and Innovation, and the study's lead author.

The trial took place in the coastal region of Basse-Guinée, the area of Guinea still experiencing new Ebola cases when the trial started in 2015.

To assess safety, people who received the vaccine were observed for 30 minutes after vaccination, and at repeated home visits up to 12 weeks later. Approximately half reported mild symptoms soon after vaccination, including headache, fatigue and muscle pain, but recovered within days without long-term effects. Two serious adverse events were judged to be related to vaccination (a febrile reaction and one anaphylaxis) and one was judged to be possibly related (influenza-like illness). All three recovered without any long-term effects.

Novartis' healthcare programme to increase availability of essential medicines

Novartis announced the launch of an innovative technology-based healthcare programme called SMS for Life 2.0 in Kaduna State, Nigeria.

The programme aims to increase the availability of essential medicines and improve care for patients across the region by using simple, available, and affordable technology.

Joseph Jimenez, CEO of Novartis said: 'Companies must join forces with the public sector to co-create innovative solutions to improve access to healthcare around the world. This is the first step in what we hope will be an impactful public health initiative, unleashing the potential of mobile technology and big data to increase the quality of care for underserved patients.'

SMS for Life 2.0 builds on the SMS for Life programme launched by Novartis in 2009, which used cell phones to manage stock-outs of malaria medicines in more than 10 000 healthcare facilities in sub-Saharan countries. The new and enhanced SMS for Life 2.0 programme will now use smartphones and tablet computers to address key operational challenges at peripheral

healthcare facilities in Kaduna State.

Local healthcare workers will be able to track stock levels of essential antimalarials, vaccines, and HIV, tuberculosis and leprosy treatments, and send notifications to district medical officers when stock levels are low. The programme will also monitor surveillance parameters of malaria, maternal and infant deaths and seven other diseases, including measles, yellow fever and cholera. In addition, SMS for Life 2.0 will enable training of healthcare workers in local facilities using on-demand eLearning modules.

'With more than six million people, Kaduna is Nigeria's third most populous state. We hope the programme will improve healthcare services by expanding access to essential medicines, thus reducing disease prevalence in communities,' said Dr. Hadiza S. Balarabe, Executive Secretary of Kaduna State Primary Health Care Development Agency.

In addition to the launch in Nigeria, Novartis and its non-profit partner Right to Care, have signed a memorandum of understanding with the Zambian Ministry of Health to deploy SMS for Life 2.0 in up to 2000 health facilities across the country.

Zimbabwe tackles mental health with 'friendship benches'

Doctors estimate one in four Zimbabweans battles depression or anxiety, but there are just 12 psychiatrists treating the entire population of 14 million.

'We cannot possibly go the route of training psychiatrists and psychologists because it would take 15 years,' said Dr. Victoria Simms of the London School of Hygiene and Tropical Medicine.

Local doctors have come up with a simple, but seemingly effective, answer. Wooden seats, or 'friendship benches', were installed on the grounds of several health clinics in Harare. Visitors were offered six one-on-one counselling sessions with lay health workers, known as 'grandmother health providers'.

'Those women were trained 'to offer problem-solving therapy,' Simms said.

'And so the patient explains what all their problems are, and it is opening up the mind in the sense of allowing the patient to see that they can do something about their problems.'

The study involved more than 550 patients. After six months, 14% of the patients in the friendship bench group reported symptoms of depression, compared to 50% in a control group. They were also five times less likely to have suicidal thoughts.

That success has led to friendship benches being rolled out at 60 clinics in Harare and two other cities.

Researchers say it could be a blueprint for mental health in low-income regions, and could even offer lessons for treatment in richer countries.

Photo credit: WHO/S. Hawkey

Malaria continues to outsmart control programmes and controls

Despite major progress in the fight against malaria, the mosquito-borne disease remains an acute public health problem, particularly in sub-Saharan Africa, home to 90% of the world's malaria cases, according to an annual flagship report by the World Health Organization (WHO).

'We are definitely seeing progress,' said Pedro Alonso, Director of the WHO Global Malaria Programme. 'But the world is still struggling to achieve the high levels of programme coverage that are needed to beat this disease,' he added.

The report reveals that children and pregnant women in sub-Saharan Africa have greater access to effective malaria control. Across the region, a steep increase in diagnostic testing for children and preventive treatment for pregnant women has been reported over the last five years. Among all populations at risk of malaria, the use of insecticide-treated nets has expanded rapidly.

According to the World Malaria Report 2016, there were 212 million new cases of malaria and 429 000 deaths worldwide in 2015.

Sub-Saharan Africa carries a disproportionately high share of the global malaria burden. In 2015, the region was home to 90% of malaria cases and 92% of malaria deaths. Children under five years of age are particularly vulnerable, accounting for an estimated 70% of all

malaria deaths.

Eliminating malaria in at least 10 countries is a goal for 2020. The report shows that prospects for reaching this target are bright: In 2015, 10 countries and territories reported fewer than 150 indigenous cases of malaria, and a further nine countries reported between 150 and 1000 cases.

Countries that have achieved at least three consecutive years of zero indigenous cases of malaria can apply for the WHO certification of malaria elimination. In recent months, the WHO Director-General certified that Kyrgyzstan and Sri Lanka had eliminated malaria.

Last month, WHO announced that the world's first malaria vaccine would be rolled out through pilot projects in three countries in sub-Saharan Africa. Vaccinations will begin 2018.



Gates Foundation to invest in HIV prevention device

The Bill & Melinda Gates Foundation is investing as much as US\$140 million to support development of a tiny implantable drug pump it believes could help prevent people in sub-Saharan Africa and elsewhere from becoming infected with HIV, the virus that causes AIDS.

The matchstick-size pump is being developed by Intarcia Therapeutics Inc., a closely held Boston biotechnology company. It can hold six or 12 months' supply of medicine and is designed to deliver microdoses continuously to patients, ensuring they stay on the treatment.

The new investment comes amid

a flurry of fresh efforts to develop HIV prevention strategies.

The National Institute of Allergy and Infectious Diseases announced a global 4500-patient clinical trial to test whether injections every eight weeks of an experimental HIV drug, cabotegravir, from UK-based ViiV Healthcare is effective in preventing HIV infection. In November 2016, the first efficacy study of an HIV vaccine in seven years begun in South Africa.

This is 'one of the most exciting years ever in HIV prevention,' said Mitchell Warren, executive director of AVAC, a global HIV advocacy organisation supported by the Gates Foundation.

Female literacy link to high teenage pregnancy rate in Africa



A high teenage pregnancy rate in Africa is directly linked to poor female literacy, researchers have found.

The continent has one of the highest levels of teenage pregnancies in the world, but until now there have been few investigations into the determining factors.

A new study conducted by University of Wolverhampton academics uses World Bank Organisation data to examine social and economic influencers.

In a series of two articles, results suggest that healthcare expenditure, female literacy rate and Gross Domestic Product (GDP) per capita are the main predictors of teenage pregnancy, with the literacy rate being the key predictor.

Poor access to sexual health services and urbanisation were also determinants of teenage pregnancy amongst developing countries.

Opeyemi Odejimi, a doctoral student who worked with senior public health lecturer, Denise Bellingham-Young, while studying for her Master of Public Health degree have put together recommendations in a policy pathway document, including strategies to increase female literacy, which they believe would help reduce the rate.

Opeyemi said: 'A significant strong relationship was observed between literacy rate with contraceptive prevalence rate and healthcare expenditure, illustrating that in African countries where literacy rate is high, contraceptive prevalence rate and healthcare expenditure is also high.'

She added policies to increase female literacy rate in Africa would also help ensure that individuals are literate enough to understand the sex and relationship education given, and are able to dispel myths and misconception.

The report is a large population-based study with national coverage of all countries in Africa and the findings are representative of the continent as a whole.

Using mHealth to track and treat HIV in Africa



The Vodafone Foundation is launching an mHealth programme in Lesotho that enables healthcare workers (HWs) to treat people with HIV, while also paying for transportation costs.

The Vodafone Foundation is launching the platform in Lesotho, a small country of some two million people completely surrounded by South Africa. In conjunction with the Lesotho Ministry of Health, the foundation is launching an mHealth app for HWs that tie into a central database and M-Pesa, a mobile money service used throughout sub-Saharan Africa.

Through the programme, HWs in mobile clinics throughout the country will provide onsite HIV testing, then register those testing positive in the central database. Healthcare providers will use that database to coordinate care for those patients, who can tap into M-Pesa for money to pay for transportation to the nearest health clinic.

While the programme is focused on pregnant women, mothers and young children, officials hope to extend it to all of the population eventually. Lesotho's government has also announced that the program will be fully funded by mid-2017.

The project is one of dozens of mHealth programmes focusing on public health issues and vulnerable populations in Africa, which offers plenty of examples to the developed world of how mobile health technology can be used to improve access and outcomes in targeted populations. In nearby Tanzania, for example, a smartphone-based programme launched by the University of Glasgow is helping HWs identify, treat and contain rabies. And mHealth and telehealth programmes played a significant role in containing the Ebola outbreak in 2014.

Lesotho also makes an ideal testing ground for an mHealth programme focused on improving access for underserved populations: The country is mountainous and rural, with 40% of the population living below the international poverty line of US\$1.25 a day.

ECOWAS launch cross border meeting on epidemic disease

Delegates from the Economic Community of West African States (ECOWAS) met at the end of last year at a three-day cross-border meeting to discuss epidemic-prone disease.

The meeting was intended to strengthen the epidemiological surveillance and response to many epidemics through implementing Integrated Disease Surveillance and Response (IDSR), in accordance with the memorandum of cooperation for epidemics control.

Speaking at the meeting, Catherine Cooper, head of prevention and control at the Ministry of Health said they are pleased to have such a meeting after the Ebola virus has recently devastated the three Mino River Union countries and extended to other countries in the ECOWAS region.

'We have learned that disease has no border. Outbreak diseases can spread from one country to another country and from one continent to another continent. And we know that international travel is prominent,' Co-

per said. 'It is therefore very important and critical that we as countries prepare ourselves with technical support from our partners to strengthen our cross-border surveillance.'

'Our public health emergency preparedness must first start in our individual countries, we must set our propriety well so that we increase the capacity at the country level so as to prevent, to detect and to respond to any public health emergency of international concern,' she added.

The head of disease prevention and control at the World Health Organization, Dr. Clement Peter said the meeting provides a unique opportunity to improve cross border collaboration beyond the landscape and lens of epidemic-prone diseases.

He noted that lessons learned from the recent Ebola virus crisis created the momentum to strengthen cross border conversations as evident by several cross border coordination meetings and interventions.

Nonprofit cosmetic surgery for breast cancer survivors

Dr. Kwasi A. Debra, a US based Ghanaian cosmetic surgeon, is wishing to set up a West African nonprofit cosmetic surgery unit for breast cancer survivors.

He is hoping that more people across the West African sub-region come to benefit from the treatment unit. Partners and potential sponsors have begun working together to make the West Africa Nonprofit Cosmetic Surgery Unit (WANCSU) a possibility by the close of 2025.

'Based on my years of experience from working in Ghana on women coming from across various West African countries to the CCSG, I have been able to identify some of these needs to be in the forms of breast reconstruction and cosmetic procedures for people who have had breast cancer and have received treatment,' Dr. Debra said.

The cosmetic surgeon went on to say that '...some of these women after receiving breast cancer treatment might have prosthesis fitted to create the ap-

pearance of an actual breast. Eventually, some of them though need extensive surgery that might seem reconstructive with certain cosmetic components involved.'

'It is for situations like these that make me want to invest in setting up the WANCSU non-profit unit where we can get potential sponsors to help us assist people that need cosmetic surgery related treatment that is not vanity but more humanitarian oriented,' the surgeon said.

Cosmetic and plastic surgeons from all over the world and Africa would be encouraged to lend expertise and time to treating patients within the West Africa sub-region.

'My partners and I are calling on anyone interested in helping make this 2025 dream of ours to set up WANCSU a reality to reach out so we can start laying the foundation stone for this all important humanitarian responsibility,' he said.

Anyone interested in Dr. Debra's WANCSU project can contact him via email: concierge@aestheticlavc.com.

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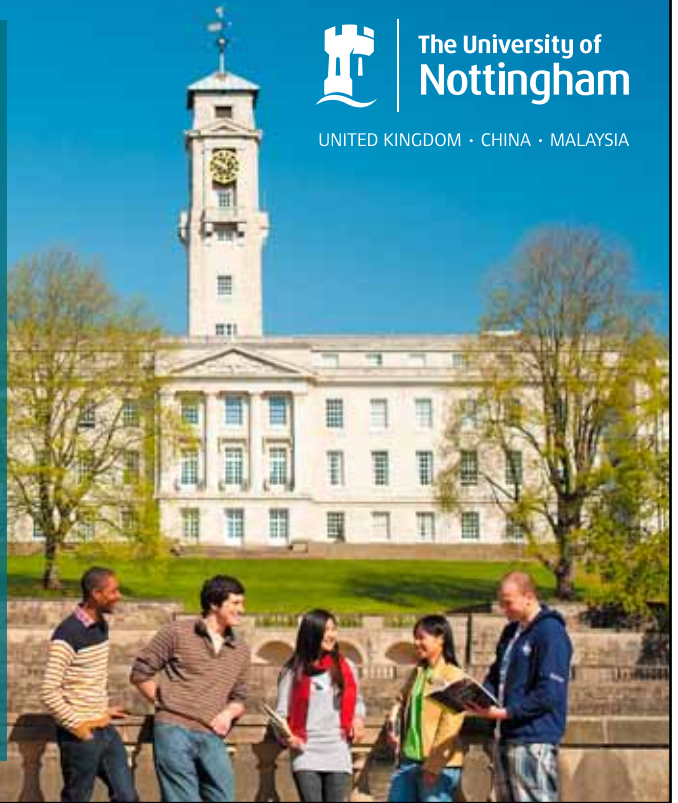
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