Taking the N out of NTDs

New initiatives from GSK, an *Africa Health* **Publishing Partner**

Over the course of the 20th Century much was achieved in improving public health in the developing world. Better sanitation and mass immunisation programmes led to significant improvements in life-expectancy. Over the past decade, the global community has worked together even more effectively to tackle the challenges of improving healthcare in the world's poorest countries. There are now over 6 million people in developing countries receiving treatment for HIV/AIDS – an unthinkable number compared with just a few years ago.

This goes far beyond mere statistics, of course. It is about people, families, and communities.

More parents are seeing their children live healthily and get to school. Fewer families are being broken apart by deaths during childbirth. Communities are prospering thanks to treatment for HIV/AIDS allowing people to continue to work productively rather than suffer a lingering death.

However, amongst the success stories, there are still major challenges and medical needs to be addressed. One area in particular has been highlighted by the recent publication of WHO's first report on neglected tropical diseases. The 17 neglected tropical diseases – parasitic and bacterial diseases, such as lymphatic filariasis, onchocerciasis and leishmaniasis – represent a major disease and economic burden and are concentrated amongst the poorest people on the planet. Ill health keeps these people in poverty and prevents them from benefiting from social progress. It is a vicious cycle of sickness and poverty that must be broken.

The World Health Organization has shown leadership in drawing attention to these diseases. The Report also details some major success stories that have come from coalitions of stakeholders working together to tackle NTDs. One example is the Global Alliance to Eliminate Lymphatic Filariasis, (a devastating parasitic infection spread by mosquitoes that can result in chronic swelling of the limbs and male genitals) in which **GlaxoSmithKline** and other pharmaceutical companies have played a leading role.

However, more needs to be done. WHO report highlights the need to take a coordinated and comprehensive approach to tackling these diseases. In particular, efforts to address another NTD – soil transmitted helminths (STH) also known as intestinal worms – are inadequate. It is in this spirit that **GSK** announced that it will substantially expand its donation programme for a key medicine called albendazole which is used in the treatment of intestinal worms.

The greatest impact of this infection falls on children. Carrying intestinal worms slows their growth and development and causes absenteeism from school which harms their education. Fortunately, de-worming usually results in immediate improvements in child health and development. The World Bank ranks intestinal worms as causing more ill health in school-age children than any other infection. Worldwide there are approximately 1200 million children at risk, of which approximately 300 million are in Africa.

WHO currently recommends annual treatment of all children aged 1–15 in STH endemic areas. However, only around 10% of the people who could benefit from treatment receive it.

Overall, expanding the donation takes **GSK**'s donation of albendazole to the WHO to 1 billion tablets a year and should ensure that all school age children in Africa can be treated against this disease. This will not be an easy undertaking. It will require a long-term partnership with WHO and the development community. Additionally, medicines will need to be accompanied by economic development initiatives such as provision of sanitation and encouraging children to wear shoes, in order for infections to more sustainably decline.

But it is only comprehensive collaborations such as this that will help to ensure that NTD diseases can no longer be considered as neglected and even more importantly that the communities they effect no longer feel neglected and isolated from economic development and social progress.

And then there is the little matter of malaria. It appears **GSK** is edging ever closer to a significant breakthrough with its Mosquirix vaccine. According to Dr Ally Olotu, lead researcher from the Kenya Medical Research Institute-Wellcome Trust Research Program, the vaccine provides 'sustained efficacy for at least 15 months and shows promise as a potential public health intervention against childhood malaria in malaria endemic countries.'. The research continues, but there is promise that a vaccine might be ready for commercial roll out in 2015.