Britain at its Best:

Delivering opportunity for women and girls through malaria eradication

ZERO MALARIA | BRITAIN

Britain. Fighting to win.

Contents

Foreword

Baroness Liz Sugg
Board Chair, Malaria No More UK

Malaria is one of the world's oldest and deadliest diseases. It still kills a child every minute. It exacerbates inequalities and poverty. It disproportionately affects mothers, pregnant women, girls, and children under five. As Ellen Johnson Sirleaf recently wrote "Women and girls aren't only patients, they're healthcare providers, and often, the primary caregivers. When someone in the household falls sick, women and girls are left home to care for them, leading to absences from work and school and billions of pounds in lost income and productivity each year".

[i]Despite the huge gains over the last two decades, progress is beginning to go into reverse. The fight against malaria has been set back by the far-reaching impacts of the COVID-19 pandemic and deaths are now at their highest level in a decade. More than 620,000 people lost their lives to malaria in 2020, the vast majority of which were children.[ii]

But this is also a moment of opportunity. Britain's role in the malaria fight through multinational institutions like the Global Fund to Fight AIDS, Tuberculosis and Malaria has helped to save 44 million lives since its founding in 2002.[iii] The UK has also been at the frontline of world-beating scientific innovations. From the world's first-ever World Health Organisation (WHO) approved malaria vaccine created by GSK, and a second in the pipeline developed by Oxford University's Jenner Institute, to third-generation mosquito nets collaboratively developed by British-based IVCC, and pioneering seasonal chemoprevention by Medicines for Malaria Venture (MMV), the UK is at the heart of the fight against malaria. With continued and sustained investment in science to deliver new treatments and prevention, leading academics say that it is possible to eradicate malaria within our lifetimes.

Britain has always been, and should continue to be, a worldleader in the fight against global diseases. And the British public agrees. Recent YouGov polling showed that 74% of the British public want to see global leadership from the UK's next Prime Minister in fighting global diseases and 70% of the British public think the UK should use its capabilities in science and medicine to support the world's most vulnerable.[iv]

Investing in the fight against malaria will also help boost economies – each 10% reduction in malaria incidence is associated with an average rise of 0.3% in GDP per capita in countries with malaria.[v] Ending malaria for all could open trading opportunities with emerging markets whilst making countries and the global economy more resilient to future shocks. Through building the health systems and infrastructure to help mitigate the impact of the next pandemic, we will not only be saving lives but creating the markets of the future.

Women and girls are at the forefront of this fight.

The women profiled in this report are among those leading innovative research and development, driving new diagnostics to strengthen health systems, and delivering interventions to affected communities. They are the eyes and ears for spotting new diseases that could threaten our health security, and they are championing the politics of ending malaria at every level of government. They are the overlooked heroes in this battle. This report brings some of their voices to the forefront and sets out what the UK government can do to back their mission. Supporting the fight against malaria empowers women at every level, from the lab to the community health centre. Investment in fighting malaria is an investment in women and girls.

The UK and the world have a choice to make. We can invest in our collective future and the future for women and girls. Or we can step back and watch a malaria crisis unfold which will affect millions of women, girls, and children across the globe. The UK government should continue to champion the research, development and leadership of women shown in this report, and commit to working towards a zero-malaria world.

The threat malaria poses to women and children – the need for action

Malaria exacerbates poverty and deepens inequalities. Those from the most disadvantaged communities are hit hardest. As with other diseases of poverty, it is also women and girls who must bear the health, societal and economic brunt of malaria. Despite being a treatable and preventable disease, malaria is one of the leading causes of death for adolescent girls worldwide and claims the life of a child every minute.[vii]

Malaria is a disease that plagues women and girls throughout their lives, from when they are an infant to when they become a mother.

They are not only patients, but they're also healthcare providers and primary care givers. When someone in the household falls sick from malaria, it is traditionally the women and girls that must care for them. Women and girls bear the burden. They are unfairly held back, missing out on education and employment opportunities because of malaria.

Pregnant women remain one of the groups most vulnerable to malaria. Infection during pregnancy puts both mother and child at risk of issues including anaemia and premature birth that can threaten both lives. Tragically malaria causes an estimated 50,000 maternal deaths and 200,000 stillbirths every year in sub-Saharan Africa.[viii] In 2020 an estimated 819,000 children were born with low birth weight because of malaria. [ix]Preventative treatment exists, but poor uptake and access to treatment is failing women. There are simply not enough treatment options. Exclusion from trials and research has meant pregnant women, and in fact all women of childbearing age, are more exposed to this deadly disease.

In the last two decades, great progress has been made on malaria with over one billion cases prevented and over 10 million lives saved.[x] This is thanks to Britain's leading role in the Global Fund to Fight AIDS, Tuberculosis and Malaria. The Global Fund has helped strengthen health systems across the world, ensured that British science and innovation are deployed to those who need it most and supports women to access health services and leadership opportunities. But progress against malaria has stalled in recent years, and both the parasite and the mosquito are fighting back. In 2020, 627,000 people tragically lost their lives to malaria- the vast majority of whom were children under five. [xi]

But women are fighting back too. This report sets out how British-backed female scientists, researchers and community health workers are leading the malaria fight and keeping us safe at home - developing ground-breaking vaccines, drugs and innovative tools to stop malaria in its tracks. It discusses the importance of Britain's leadership in the fight against malaria in boosting economic prosperity and strengthening health security across the world. This is not only in our interest globally but in our national interest too.

We can put an end to malaria by 2030, but to do this we need Britain to step up as a global science superpower and continue to support and fund the Product Development Partnerships (PDPs) that are so vital in keeping us one step ahead of this deadly disease. We need the UK Government to continue to play a leading role in the Global Fund, following through on its commitments to the Seventh Replenishment this autumn so that we have stronger, more resiliant health systems across the world, and so we see British science and innovation deployed where it needed most. As our vaccine pipeline grows, we must ensure that the funding matches the supply. UK funding for Gavi, The Vaccine Alliance, will be crucial. Lastly, the UK has long funded bilateral programmes which strengthen community health systems and empower women as leaders on the frontline- such programmes will continue to be vital in our fight against malaria.

Britain's role as a science superpower and global leader is needed now more than ever. With Britain leading at its best, the world can end the epidemic of malaria by 2030.

Malaria exacerbates poverty and deepens inequalities

Malaria impacts every stage of a woman's life

1/3

1/3 of pregnant women in Sub Saharan Africa suffer from malaria. In 2020 there were 164,000 stillbirths due to malaria.

483,000

In 2020, 819,000 children in Africa were born with a low birth weight due to malaria. **In 2020, 483,000 children did not reach their 5th birthday due to malaria.**

1.5bn

Eradicating malaria by 2040 would increase the number of school days attended by 1.5bn. **Malaria impacts children's cognitive ability.**

Girls without a full education are less likely to get a high income and lead healthy and productive lives.

15%

Malaria accounts for 15% of maternal deaths globally. In 2015 400,000 cases of maternal anaemia were because of malaria.

SECTION 1:

Britain's global leadership boosts economic prosperity and keeps us safe at home

Twenty years ago, the UK, together with our close allies in the G7, established the Global Fund to fight AIDS, Tuberculosis and Malaria. Since then, the world has made truly staggering progress against malaria, cutting the death rate from the disease by 50% and saving 44 million lives.[xii] However, the fight against malaria is at a precarious juncture. Malaria is fighting back. Global economic prosperity, health security and opportunities for women and girls are all under threat. Britain's global leadership is needed now more than ever to keep us safe at home, boost economic prosperity and deliver opportunity to women and girls around the world.

British leadership in ending malaria will help keep us safe at home

The COVID-19 pandemic has shown us that investing in global health benefits us all. The world must be better prepared for future pandemics, and this starts with ending malaria. Malaria poses a significant threat to global health security because it could mask emerging diseases since fever symptoms associated with malaria are so similar to other infectious diseases, such as COVID-19. This coupled with low levels of treatment uptake and an estimated 40% of fevers going undiagnosed means a new disease could emerge and circulate without rapid detection.[xiii] Malaria also places a huge burden on underfunded and fragile health systems in countries where new diseases could emerge, making it harder for them to fight back on behalf of the whole world. The UK government has committed to working with developing countries to build stronger and more inclusive health systems because it is both in the global interest and our national interest to do so. We need early-warning disease detection systems across the world that are better prepared to deal with pandemics and infectious diseases. By being at forefront of the malaria fight, Britain can do just that.

Suzy Haylock, community health worker supported by the Global Fund

Suzy Haylock is a community health volunteer in Honduras. Suzy is Miskito, an Indigenous community from Central America. She lives in Cauquira, a small coastal town. Many of the people in Suzy's community are poor, relying on fishing or transporting passengers by boat to earn an income.

Suzy has seen thousands of patients, either testing or treating them for malaria, since she became a community health volunteer two decades ago. Volunteer health workers have been the backbone of Honduras' progress against malaria. In 2019, only 319 cases were recorded in Honduras, compared to 35,000 in 2000.

However, COVID-19, Tropical Storm Eta and Hurricane Iota have set back progress. In 2020 and 2021, the number of malaria cases increased after two decades of steady decline.

Suzy says it was a difficult time. People with COVID-19 would come to her house thinking they had malaria. But Suzy never stopped providing testing and treatment. The Global Fund, the National Malaria Control Program and local partners have stepped-up efforts in response, including strengthening case detection, increasing testing networks and scaling-up vector control.

Despite dedicating 20 years to fighting malaria, Suzy plans to continue her work. She is confident that with additional support, her community can eliminate the disease.

"Every week there are 25 people, almost 30. I love my people. They come to my house, and I look after them at night, in the morning, at whatever time," she says. ***"I look after everyone, regardless of where they come from."***

Through financing the Global Fund, Britain has been a global leader in strengthening health systems. In 2020 support from the Global Fund allowed 259 million suspected malaria cases to be tested, and 135 million cases of malaria were treated and removed from circulation[xiv]. It is estimated that one-third (US$6 billion) of the Global Fund's Seventh Replenishment will be used for investments in health systems and community health workers which both supports the ongoing fight against AIDS/HIV, TB and malaria and reinforces pandemic preparedness[xv]. Investing in the Global Fund not only saves lives, but helps to build a world better prepared to detect and stop new and emerging pandemic threats.

Dr Kenny Malpartida-Cardenas

Dr Kenny Malpartida-Cardenas is an EPSRC Doctoral Prize Fellow in the Department of Infectious Disease at Imperial College, London. Her research is focused on the development of novel molecular methods to improve the rapid diagnosis of infectious diseases by using digital platforms.

Her research detects the presence of pathogens which can cause infections, including the DNA of the parasite that causes malaria. By combining sensitive molecular methods and lab-on-chip platforms, a powerful point-of-care test can be created. This sort of technology has also been used for diagnostics during the COVID-19 pandemic and is vital for combatting existing diseases and detecting potential new ones too.

For example, the Lacewing diagnostic platform, a lab-on-chip platform, uses microchip technology including thousands of cutting-edge electrochemical biosensors that can be paired with a smartphone application to rapidly identify whether a person is positive for certain diseases. This portable system allows real-time identification of infected patients at the point-of-care aiming to combat further outbreaks.

Kenny was the first in her family to attend university. ***"I will always be grateful to my parents for their continuous support. Getting a microscope as a Christmas present was key to inspiring me to discover beyond what you can see."***

Ending malaria boosts economic prosperity

Economies in affected countries are often severely affected by malaria. In 2015 malaria cost the African economy an estimated $117 billion in productivity losses.[xvi] Contributing to this productivity loss are the women held back from employment and education because of the care-giver responsibilities associated with malaria. By tackling malaria, we can help boost economies and deliver opportunites and futures to women and girls. Research shows that each 10% reduction in malaria incidence is associated with an average rise of 0.3% in GDP per capita and faster GDP growth in countries affected by malaria[xvii]. Ending malaria for all could open up trading opportunities with emerging markets while making countries and the global economy more resilient to shocks. By investing in the Global Fund and playing a leading role in the malaria fight, Britain not only boosts global economic prosperity but also increases opportunities for trade and prosperity at home.

Britain showed vision for ending one of the world's oldest and deadliest diseases in our lifetimes when it helped found the Global Fund is now at risk. Britain can still lead the way and put an end to malaria by 2030. By continuing to be the driving force behind organisations such as the Global Fund, Britain will boost global prosperity and pandemic preparedness, ensure that women and girls achieve their full potential, and guarantee that world-class British science is deployed to those who need it most, in the right places at the right time.

Dr Ndifanji Melia Namacha,MBBS, MBA

"To ensure progress against malaria gets back on track, the UK Government must continue to be a world leader in malaria research and innovation and maintain its leadership role in the Global Fund" says Dr Ndifanji Melia Namacha, global health advocate and youth ambassador

Growing up in Malawi, a malaria endemic country, Ndifanji didn't want to see more generations lost to malaria or see the commonwealth continue to lose billions annually due to a preventable disease. She has dedicated her career to fighting malaria through advocacy, policy and research. Ndifanji is a global health advocate, entrepreneurial, self-driven and transformative leader with over 7 years of success in various roles. She was one of the keynote speakers at the high-level Malaria Summit during the 2018 CHOGM and delivered the youth statement at the Kigali Summit in 2022. As an advocate, Ndifanji has met His Majesty King Charles twice in London and Rwanda and has participated in roundtable discussions organised by various partners such as 'Strengthening Youth Leadership and Engagement in the Fight Against Malaria in Africa' organised by the AU Commission.

SECTION 2:

Britain's leadership as a science superpower can help us end malaria for good

To get back on track in our fight to end malaria we need to expand access to proven interventions and ensure there is a pipeline of effective tools that allows us to stay one step ahead of the disease. Strategic, innovative, and well-coordinated malaria R&D funding is therefore needed now more than ever, and the potential benefits are enormous. When combined with improved malaria control and health system strengthening, investments in malaria research and innovation have the potential to help save almost two million additional lives from malaria by 2030.

Britain as a science superpower

British scientific leadership has been at the forefront of the malaria fight, through the development of new tools to combat emerging threats such as drug resistance, and through bolstering the existing arsenal with new interventions such as the first-ever WHO approved vaccine developed by GSK. This government, through its research and development commitments, has ensured that British-backed science has the resources to develop new malaria innovations in laboratories across the country. Thanks to these efforts malaria is now preventable and treatable and as a result over 10 million lives have been saved and one billion cases prevented over the last two decades.[xviii]

The UK also supports some of the world's most prominent female scientists and researchers. They are now leading the way in the malaria fight, developing vaccines and new drugs, and protecting women and girls across the globe. But they can't do it alone - Britain is needed now more than ever to lead the way towards eradication.

British-backed innovation is combatting emerging threats

British-backed science has consistently played an important role in responding to emerging disease threats. We now face both antimalarial drug resistance and insecticide resistance, which could be devastating to the fight if left to progress. If we even slow a little in our efforts, malaria fights back. That's why it is crucial that Britain continues to lead the way in combatting these threats through innovation, expertise, and sustainable funding.

The Innovative Vector Control Consortium (IVCC), a British-backed Product Development Partnership (PDP) which brings private and public sectors together to drive innovation, has been developing novel tools to keep up with ever-evolving mosquito resistance. These innovations include next-generation mosquito nets which have been specifically developed to overcome new resistance, and the development of Attractive Targeted Sugar Bait (ATSB®) devices using funding from UK Aid.

Bringing together industry, NGO's, malaria control programmes, and scientists from some of the top UK and international universities will help to deliver the next generation of mosquito control products. It is expected that we will start to see wider deployment of these novel tools in 2023.

Janneke Snetselaar is a Technical Manager at IVCC, she explains why British-backed science and product development partnerships are needed now more than ever.

What are the challenges we are facing in the malaria fight?

One of the major challenges we face is resistance against insecticide classes, such as pyrethroids, that are commonly used to control mosquitoes. In various regions in sub-Saharan Africa, control products are no longer effective in reducing mosquito populations, leaving vulnerable people at risk. Considering the cornerstone of malaria prevention is based on two key interventions, LLINs and IRS, maintaining their effectiveness and coverage for optimal impact is critical.

Why is British-backed innovation so important in tackling malaria?

Novel chemistries that can kill resistant mosquitoes are much needed. Developing new chemistries and tools is expensive and time-consuming and requires significant commitment from innovating industries. Accelerating the development of a pipeline of products and delivering the most appropriate intervention tools where most needed, are core to the challenges we face today. New approaches to vector control products such as Attractive Targeted Sugar Baits (ATSB®) that target outdoor mosquito populations will add to the toolbox of innovations needed to control and eliminate malaria. Product-development-partnerships, like IVCC, can provide a bridge between industry, the public sector, academia, and civil society to facilitate the development and roll-out of new tools.

What is the current state of the malaria fight?

In the first decade of this millennium, we saw a steady decline of malaria cases, mainly due to the mass distribution and roll out of vector control products such as Long Lasting Insecticidal Nets (LLINs) and Indoor Residual Spraying (IRS). However, in recent years this decline has stalled, and the situation has worsened by the COVID-19 pandemic which resulted in disruptions in malaria interventions. Currently we are no longer on track to reach the 2030 targets set by the WHO in reducing the burden of malaria, and urgent action and commitment are required to reduce malaria cases and deaths in affected communities

Dr Ana Martin is a Global Clinical Development Director working across all malaria clinical research studies conducted by GSK

In recent years, Dr Ana Martin has focused on the delivery of the Tafenoquine Exposure Assessment in Children (TEACH) study which led to the approval in March 2022 of a novel, 50 mg dispersible, single-dose Kozenis (tafenoquine) tablet for use in children aged 2 years and above in combination with chloroquine for the radical cure of Plasmodium vivax (P. vivax) malaria, a strain particularly prevalent in Asia.

Tafenoquine, developed by GSK and MMV, was first approved by the US Food and Drug Administration for the radical cure of P. vivax malaria in July 2018 for use in adults and adolescents.

P. vivax malaria is estimated to cause between 4.1 and 5.1 million clinical infections every year and poses a disproportionate burden for children aged 2 to 6 years who are four times as likely as adults to be infected. The clinical features of P. vivax malaria include fever, chills, vomiting, malaise, headache and muscle pain, and in some cases, can lead to severe malaria and death.

Born and raised in Spain, Ana moved to the UK to start a degree in Medical Microbiology, leading to a PhD and postdoctoral position in infectious disease research. She joined GSK over 20 years ago and has always focused on researching infectious diseases on vulnerable populations found in low resource settings. In her spare time, Ana is a STEM ambassador and conducts science workshops in primary and secondary schools.

Alongside our British-backed scientists and world-class universities is our British pharmaceutical industry. British company GSK has long played a critical role in malaria innovation and research. GSK has led the way by developing the first-ever antimalarial treatment to be delivered as a single dose – Tafenoquine.

British-backed vaccines could change the face of the malaria fight

GSK also developed the first ever malaria vaccine (RTS,S) to have been shown in pivotal long-term clinical trials to significantly reduce malaria in children, which was prequalified by the WHO in 2022. This vaccine has already reached over a million children through the malaria vaccine implementation programme (MVIP) in Ghana, Kenya and Malawi, which was funded by the Global Fund, Gavi and Unitaid – a massive feat for British science. We know that vaccines alone are not a silver bullet for malaria, but when combined with other prevention and treatments and delivered by strongly resourced organisations like the Global Fund and Gavi, the malaria burden can be hugely decreased.

With another malaria vaccine on the horizon from Oxford University's Jenner Institute, Britain is continuing to lead the way in developing game- changing tools that could transform the malaria fight.

British-backed science is protecting women and girls

The Medicines for Malaria Venture (MMV), a British-backed Product Development Partnership (PDP), is paving the way in radically reducing the impact of malaria on women and girls.

They are doing this through their Malaria in Mothers and Babies (MiMBA) strategy and have created a pregnancy register to help discover antimalarials that are safe to use in pregnancy.

Dr. Cristina Donini, Senior Director, Head of Program Leadership and Strategy at MMV, explains the challenges faced by pregnant women from malaria and how MMV is making strides to overcome them.

Why are pregnant women particularly susceptible to malaria? Why do they have fewer options for malaria treatment? How does this impact them?

Pregnant women are particularly susceptible to malaria infection mainly due to immunological changes occurring in pregnancy and the ability of the parasite to accumulate in the placenta. Common consequences of malaria in pregnant women are maternal anaemia, premature labour and poor birth outcomes. In 2020, 11.6 million pregnancies were exposed to malaria infection in sub-Saharan Africa resulting in 819 000 newborn babies with a low birthweight. Further, for each infection, two lives are at stake.

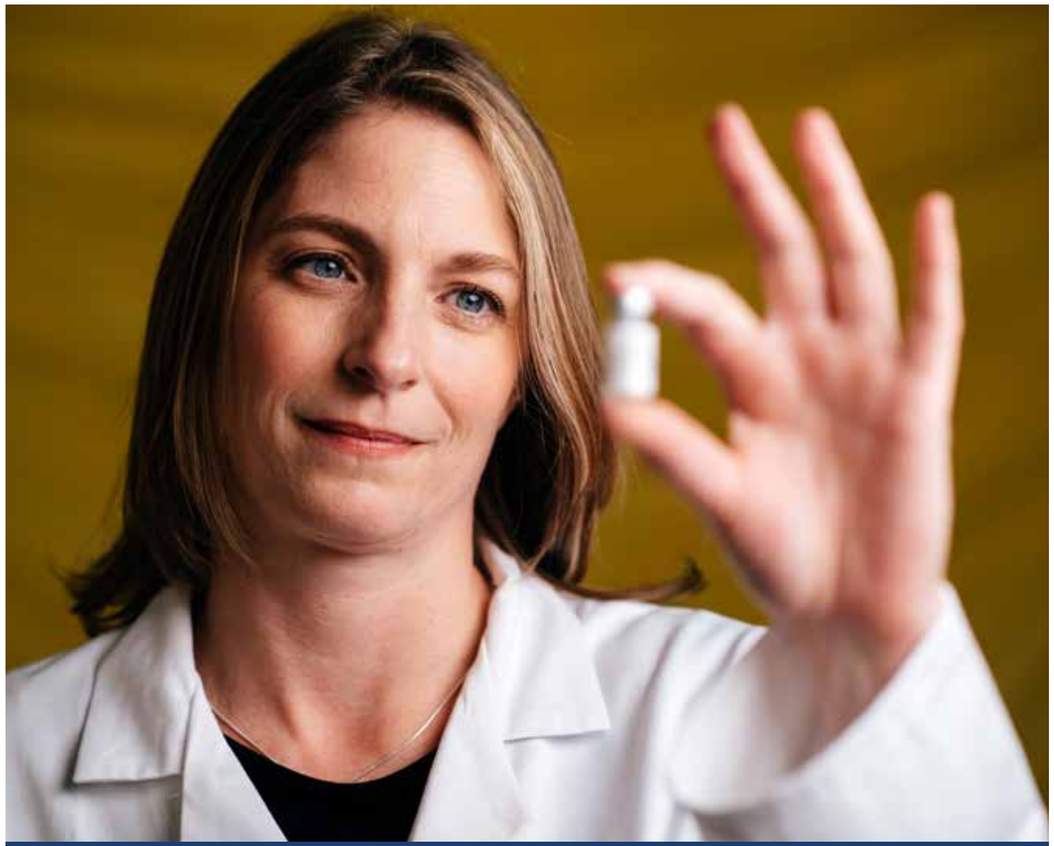
Most antimalarial treatments currently indicated for adults are not suitable for pregnant women due to a lack of safety data. During the clinical development of new antimalarial drugs, pregnant and lactating women are typically not included in pre-registration clinical trials due to fear of causing harm. As a result, there is limited data on the risks and benefits of use of antimalarial medicines during pregnancy and lactation, and limited options to prevent or treat malaria in pregnancy, particularly in the first trimester.

How is MMV making sure pregnant women can access new drugs in the pipeline?

MMV contributes directly to close the gender-related data and medicines gap for pregnant and lactating women in malaria-endemic countries through its Malaria in Mothers and Babies (MiMBa) strategy. The MiMBa strategy aims to accelerate the discovery, development, and delivery of appropriate antimalarial options for this population. It will: broaden access to currently used antimalarials; accelerate R&D for pregnant or lactating women, advocate for greater inclusion of pregnant and lactating women across antimalarial R&D.

What is MMV's 'pregnancy registry' and what is it trying to achieve?

MMV and the Liverpool School of Tropical Medicine have established a pregnancy registry in malaria-endemic countries across sub-Saharan Africa, which prioritizes data collection. New and better data could help shed light on which antimalarials are appropriate for use in pregnancy, and this, in turn, could be a first step towards an increase in the number of antimalarial options available to pregnant women, particularly in the first trimester. Ultimately, the project will help to remove the barriers preventing pregnant women from accessing improved frontline antimalarial medicines, impacting women of childbearing age globally, including travellers.



Professor Katie Ewer is a Senior Immunologist for the Jenner institute, University of Oxford. She explains how a new malaria vaccine currently undergoing trials could be a gamechanger for the malaria fight if proven effective.

What is R21 and how has British science played a role in its development?

R21 is a malaria vaccine that is currently undergoing clinical trials. It has been developed by our team at the Jenner Institute at Oxford University. It is a really exciting time to be working in malaria research and British-backed institutions and scientists are playing a leading role.

What impact could R21 have?

Despite great progress against malaria in the last two decades, we still see too many lives lost every year. Vaccines are a crucial tool in our malaria toolbox, which can help finally put an end to malaria. Early results from our trials have shown R21 to have a high-level efficacy, achieving the WHO-specified efficacy goal of 75%. Our phase 3 trial results are expected at the end of 2022. If they show the same levels of efficacy then R21 could be a game-changer for the malaria fight.

How can Britain continue to be a global leader in vaccines and malaria?

Continuing to support British institutions like the Jenner Institute is crucial. But it's not just the science that is needed, we need to make sure that tools and vaccines are also deployed. I hope to see the UK government continuing to support and fund organisations like the Global Fund and Gavi to make sure our British science gets to those who need it most.

SECTION 3:

Deploying British science and supporting health systems across the world

Deploying British science through the Global Fund

Science and innovation are useless unless tools can be successfully deployed where they are needed most. This is why the work of organisations like the Global Fund to Fight AIDS, Tuberculosis and Malaria is so important. Funding from the UK government ensured that these life-saving tools don't just stay in the lab but reach those who need them. Without the UK government's support to the Global Fund

these tools would remain researched, developed, and studied but not deployed at scale. The impact of any tool, no matter how efficacious, is zero if it does not reach those it was developed for.

The Global Fund has been instrumental in ensuring British-backed innovations reach the women and children who need them most. From strengthening supply chains, to funding large scale trials for the RTS,S vaccine, to ensuring the distribution of over 35 million Interceptor® G2 mosquito nets, the Global Fund has been vital in the malaria fight so far. If we are to win this fight, continued commitment and funding from the UK Government for the Global Fund is critical.

Driving the malaria vaccine implementation

In 2021, we celebrated the first ever malaria vaccine approved by the World Health Organisation (WHO). This was quickly followed by a commitment from Gavi to support the malaria vaccine introduction, procurement and delivery for Gavi-eligible countries in sub-Saharan Africa in 2022-2025. Final Phase 3 trials are ongoing for R21, another malaria vaccine developed right here in Britain by the Jenner Institute. If R21 continues to show high efficacy and safety in trials, it is incumbent on all partners to provide the funding and delivery support needed to ensure it reaches the arms of the children who could benefit as soon as possible.

Bilateral programming in community health is central to the malaria fight

Community health workers play a vital role in strengthening health systems, delivering treatment, and ending preventable deaths. They act as a first line of defence against health security threats as the eyes and ears on the ground spotting emerging diseases. Scaling up support for community health is also a priority for women and girls, and critical to the achievement of universal health coverage (UHC), in line with the Sustainable Development Goals (SDGs).

Women make up approximately 70% of this community health workforce.[xix] They are on the frontline of the fight but are often not trained or equipped to adequately diagnose and treat diseases. Often, they are not even paid. Community health workers need better education, training, and formal employment.

The UK government recently funded a programme in Nigeria to improve the number and capacity of female health workers in six states. Women for Health (W4H) was an eight year, £35.7m programme, which started in 2012.[xx] Its goal was to increase women and children's access to health services in areas of high unmet need. Its main purpose was to increase the number of female health workers in training to serve in rural health facilities in Northern Nigeria. The project was designed to improve health training and education for over 6,000 rural girls and women; to support the recruitment and retention of 250 female midwives, and to assess the need for a new cadre of community health workers. W4H has demonstrated a successful package of interventions that leads to the increased production of health workers and increased number of female health workers in rural areas. It is programming like this that strengthens health systems, empowers women, and reaches those most in need that is vital to the malaria fight.[xxi]

Britain has an opportunity to not only end malaria and keep Britain safe but empower millions of women across the world by supporting the Global Fund and investing in bilateral programming which focuses on strengthening community health systems.

Over the last two decades great strides have been made in the fight against malaria, with the innovation and expertise of British science, reinforced by the leadership and investment of the UK government, playing a critical role. Britain can step up now as a global science superpower, delivering opportunity for women and girls and leading us to malaria eradication by continuing to fund and support PDPs and funding vital programmes to ensure British science is deployed where is needed most.

Transforming Intermittent Preventive Treatment for Optimal Pregnancy (TIPTOP) project

The UK was a founding member of Unitaid and made a 20-year funding commitment of £790 million in 2006 when the organisation started. This commitment has helped shepherd in major advances against malaria over the past 15 years, including seasonal malaria prevention strategies, indoor sprays and new bed nets. Most recently, this has supported Unitaid in funding the five-year Transforming Intermittent Preventive Treatment for Optimal Pregnancy (TIPTOP) project. This project aimed to increase coverage of preventative treatment for pregnant women in four African countries. By working with community health workers to deliver antimalarial medicine to pregnant women where they live, Unitaid helped demonstrate a model that doubled coverage of three doses of malaria preventive medicine during pregnancy in most project districts, with some settings seeing increases of up to five-fold. The TIPTOP project was also accompanied by additional investment to MMV to address the supply-side barriers that also prevent uptake of IPTp, including supporting local manufacturing in Africa. One success story is in the DR Congo:

"We are very happy with the work of the community health workers who combat malaria during pregnancy. We sincerely thank the District officials and the partner Jhpiego/TIPTOP for all the efforts made so that our lives and those of our babies are saved thank you to the quality of the work done by the community health workers who never stop sensitizing us, referring us to the Kaparangao Health facility where we receive advice and quality prenatal care as well as the IPTp at each scheduled time. Currently, with this project, we feel strong during pregnancy and confident our children will be born healthy."

Sylvie Salima Mukaba & Odette Sifa Akilimani, pregnant women from the Kaparangao Health facility

The UK's leadership and central role in Unitaid is directly improving the lives of women in Africa, but a continued commitment is needed to see projects like TIPTOP scaled up and reaching all women who need it.

Recommendations

As this report has shown, the path to ending malaria by 2030 is not easy, but it is achievable with Britain's continued active leadership. The following recommendations, if followed, would pave the way to ending the epidemic of malaria within the next decade:

1. **The UK should maintain its leadership role within the Global Fund to Fight AIDS, Tuberculosis and Malaria and ensure commitments to the Seventh Replenishment are delivered in full, as requested by the Global Fund Secretariat.**

2. **The UK should remain a science superpower and invest long-term resources into the highly effective Product Development Partnerships, and research and development. This will ensure we have a strong pipeline of innovations, so that we can stay one step ahead of malaria. The UK should also continue to provide opportunities for women to excel in science and research.**

3. **The UK should ensure that there is enough funding through Gavi to deploy approved malaria vaccines as quickly as possible and to where they are needed most.**

4. **The UK government should also increase sustainable, flexible, and long-term financing through its bilateral Overseas Development Assistance (ODA) investments to support integrated, country-owned and -led community health programmes, with an emphasis on the training and payment of community health workers, especially those from marginalised and vulnerable communities.**

To help deliver these recommendations, a new sense of urgency is needed within government. Malaria needs a champion who can ensure that Britain's leadership delivers. This is why we also recommend:

5. **The UK should appoint a malaria champion within government to coordinate efforts in ending malaria and delivering on its commitments.**

References

[i] Ellen Johnson Sirleaf, 'Here's How I Survived Malaria' https://www.theglobalfund.org/en/opinion/2022/2022-06-22-ellen-johnson-sirleaf-heres-how-i-survived-malaria/

[ii] World Health Organisation, 2021, World Malaria Report 2021 https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021

[iii] Results Report 2021. The Global Fund corporate_2021resultsreport_report_en.pdf (theglobalfund.org)

[iv] All figures, unless otherwise stated, are from YouGov Plc. The total sample size was 1717 adults. Fieldwork was undertaken between 8 – 9 August 2022. The survey was carried out online. The figures have been weighted and are representative of all GB adults (aged 18+). The findings include a breakdown by vote in the 2019 General Election and by region, they can be accessed here https://bit.ly/3d7nsuJ.

[v] Sarma N, Patouillard E, Cibulskis RE, Arcand JL. The economic burden of malaria: revisiting the evidence. Am J Trop Med Hyg. 2019;101:1405–15. https://doi.org/10.4269/ajtmh.19-0386

[vii] World Health Organisation, 2021 World Malaria Report https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021

[viii] https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30161-6/fulltext

[ix] World Health Organisation, 2021 World Malaria Report https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021

[x] World Health Organisation, 2021 World Malaria Report https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021

[xi] World Health Organisation, World Malaria Report 2021 https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021

[xii] Results Report 2021. The Global Fund corporate_2021resultsreport_report_en.pdf (theglobalfund.org)

[xiii] Rolfe. B, 2021, Leave No Fever Unresolved: The malaria pathway to end this pandemic- and prevent the next, https://malarianomore.org.uk/report-highlights-malaria-global-health-security

[xiv] Results Report 2021. The Global Fund corporate_2021resultsreport_report_en.pdf (theglobalfund.org)

[xv] Fight for What Counts. Investment Case Seventh Replenishment 2022. The Global Fund publication_seventh-replenishment-investment-case_report_en.pdf (theglobalfund.org)

[xvi] A heavy burden: the productivity cost of illness in Africa. Brazzaville: WHO Regional Office for Africa; 2019. Licence: CC BY-NC-SA 3.0 IGO. Productivity cost of illness 2019-03-21.pdf (reliefweb.int)

[xvii] Sarma N, Patouillard E, Cibulskis RE, Arcand JL. The economic burden of malaria: revisiting the evidence. Am J Trop Med Hyg. 2019;101:1405–15. https://doi.org/10.4269/ajtmh.19-0386

[xviii] Hennessee, I., Chinkhumba, J., Briggs-Hagen, M. et al. Household costs among patients hospitalized with malaria: evidence from a national survey in Malawi, 2012. Malar J 16, 395 (2017). https://doi.org/10.1186/s12936-017-2038-y

[xix] CHW Central, 2017, 'Women in the changing world of community health work' https://chwcentral.org/twg_article/women-in-the-changing-world-of-community-health-work/

Foreign, Commonwealth and Development Office (FCDO), Women for Health (W4H) Programme, 2021, https://devtracker.fcdo.gov.uk/projects/GB-1-202694/summary

[xx] Foreign, Commonwealth and Development Office (FCDO), Annual review (6) 202694 (published-

[xxi] March, 2021) HYPERLINK "https://devtracker.fcdo.gov.uk/projects/GB-1-202694/documents" DevTracker Project GB-1-202694 Documents (fcdo.gov.uk)

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