

Malaria Outbreak in Mali- World Health Organisation Disease Detective Division- December 29th 2019

Last week on the 29th December 2019 the World Health Organisation was alerted to an alarming, sudden outbreak of the fatal infectious disease known as Malaria in a village located in Mali, a landlocked country situated in East Africa. Malaria is a life-threatening mosquito-borne disease caused by parasites called Plasmodium. The disease is extremely common in sub-Saharan Africa, south-east Asia and the Americas. This is very worrying as a disease as deadly as malaria can cause chaos if this outbreak spreads further. Malaria is among the 10 countries in Africa with the highest cases of Malaria, making up 3% of infected Malaria patients in the world and 7% in West Africa, The World Health Organisation World Malaria Report 2019¹ showed. The same report¹ also showed that over 19 million people are at risk of malaria in Mali, along with an estimated 7 million cases and eleven thousand deaths. Groups vulnerable to Malaria include Children under 5 years old (including infants), pregnant women and non-immune migrants. A World Health Organisation study estimated that over half the world's population is at risk of Malaria. Symptoms of this fatal disease include fevers, headaches, vomiting and diarrhoea. Malaria develops from a sickness to a genuinely life-threatening illness if not treated within 24 hours, which can cause destruction of the red blood cells and can sometimes even cause the brain to swell and cause permanent damage.

Containing and eradicating Malaria is of the utmost importance considering how many millions of people have passed due to this disease in the last 20 years. The infection rates must be crushed immediately as the more people get infected by Malaria the greater the risk of plasmodium transmitting to others around that person through mosquitos. Considering that Mali is located in West Africa and is a Low Income Country, it is apparent that this outbreak must be squashed immediately as Mali will not have the resources to contain this disease and it may cause yet another widespread Malaria epidemic that will claim hundreds of thousands of lives. Furthermore, ending the plague on the world that is Malaria will be a great victory for the economy, as the current state of Malaria is extremely detrimental to it. The presence of Malaria restricts communities from prospering, especially in Low-Income Countries. Moreover, Malaria eradication can have a prosperous effect on the economy in other ways as studies have shown that countries that are malaria-free have a 5x greater economic growth than infected countries² and that just a 10% reduction in Malaria cases can directly cause a .3% increase in the countries GDP².

Malaria may be hard to stop as common deterrents for the mosquitos, which carry the plasmodium parasites that cause the disease, such as insecticide, are being used exponentially. Because of this, mosquitos are beginning to adapt and become resistant to these insecticides, making it increasingly difficult to combat this disease. Furthermore, Malaria is hard to stop as common measures for disease outbreaks such as isolation and well-kept hygiene may be of no use when combating Malaria as it is not spread via human contact or air travel and instead is transmitted from infected mosquitos. Because of this, new measures must be put in place to combat Malaria specifically. Additionally, the disease is very difficult to accurately diagnose as its symptoms, such as headaches and vomiting, are extremely similar to the symptoms of the flu, a far more common and less fatal infection. This also causes treatment problems as if Malaria is incorrectly diagnosed as the flu then by the time its true identity as malaria is revealed it will be too late and may already be fatal.

Unfortunately, due to the village in question being situated in Mali, a Low Income Country, the people may not be able to afford proper treatment and preventive methods such as vaccines, making it an even greater challenge to control the outbreak.

As the head of the World Health Organisations Disease Detective Division, I have a multitude of suggestions on different ways we can contain and quash this outbreak before it becomes yet another widespread malaria epidemic. Firstly, Mosquito nets, specifically ones coated in insecticide, should be provided to the general population of the village and surrounding villages in Mali to sleep and take shelter under, as they shall act as a barrier and repellent to the plasmodium-carrying mosquitos. In addition, surveillance on this disease must be provided in order to accurately track and trace the disease's progress in the infected as well as whether it is spreading further through Mali and beyond. Furthermore, the developmental Malaria vaccine, if proven to not have any severe adverse side effects, should be distributed among the people of Mali and other Sub-Saharan African countries in haste as it may be the greatest hope against a Malaria epidemic. The World Health Organisation formally recommends that early diagnosis and treatment be put in place and that all suspected Malaria cases be confirmed using parasite based diagnostic testing.

In conclusion, the constraint and extinction of malaria are of paramount importance in current times as Malaria has been, for years, a burden on the world and the society we have built. If this disease is not dealt with accordingly and is allowed to remain a plague to our planet then we will all suffer for it. Millions have died due to Malaria and Millions more will die in the future if we do not take action. Vaccine development must be increased and suitable solutions and preventative actions must be taken, such as those I have recommended. Malaria will not wither away and fade on its own so it is up to us to eradicate it for the good of the human race as otherwise, people will die by the millions and economies and business will suffer immensely and may even be shattered beyond repair.

Head of the World Health Organisation Disease Detective Division

1- World Health Organisation World Malaria Report 2019-

<https://www.developmentaid.org/api/frontend/cms/file/2019/12/9789241565721-eng.pdf>

2- Malaria No More-

[https://www.malarianomore.org/why-end-](https://www.malarianomore.org/why-end-malaria/#:~:text=BECAUSE%20ENDING%20MALARIA%20STIMULATES%20ECONOMIES,growth%20than%20countries%20with%20malaria.)

[malaria/#:~:text=BECAUSE%20ENDING%20MALARIA%20STIMULATES%20ECONOMIES ,growth%20than%20countries%20with%20malaria.](https://www.malarianomore.org/why-end-malaria/#:~:text=BECAUSE%20ENDING%20MALARIA%20STIMULATES%20ECONOMIES,growth%20than%20countries%20with%20malaria.)