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Guinea : Malaria

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Guinea

ABOUT THE NATION

Guinea is a country in Western Africa. It is bordering to the North Atlantic Ocean, Guinea-Bissau, Sierra Leone, Senegal, Mali and the Ivory coast. It is located between the equator and the tropic of cancer, which has made the climate generally hot and humid. Its surface area is 246, 000 square km. 58 percent is agricultural land and 27 percent is forest. An important water source is the river Niger. The Guinean population is around 13,290,659(2017). 1.661 million live in the capital Conakry. The biggest ethnic groups in Guinea are Fulani, Malinke, Susu, Guerze, Kissi, and Toma. The official language is French, but these ethnic groups have their own languages too. Almost 90 percent of the population are Muslims. Guinea has not gone through the demographic transition. The population has high fertility rate with five children per woman and has a life expectancy of 61 years (UNICEF, 2017). This is a result of lack of access in healthcare which leads to infections that are treatable and avoidable, becoming one of the most common death causes. In developed countries these death causes would therefore have been minimized, but because the people are poorer, the public health and healthcare are less developed and they die preventable deaths.

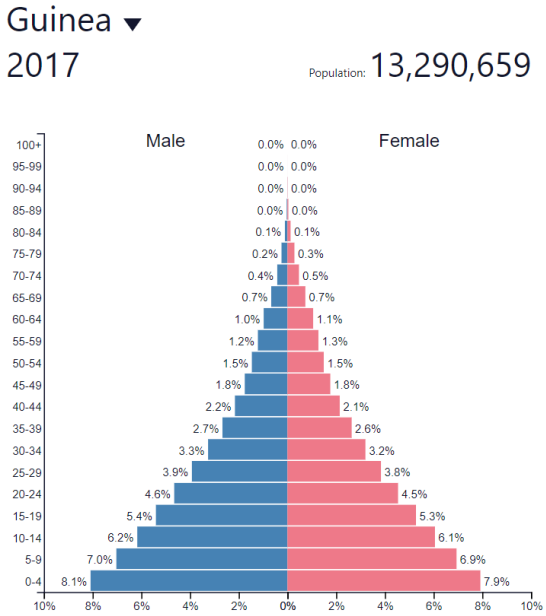

Figure 1 describes the age distribution of males (blue) and females (red) in Guinea 2017. (UNICEF)

The nation is a presidential republic which has a civil law system based on the French model. Every fifth year the president is elected by absolute majority votes in two rounds, and then the prime minister is appointed by the president. The current president, Alpha Condé, got elected in 2010 and was reelected in 2015.

More than half of the population is living in poverty and a third in malnutrition. Guinea has abundant natural resources which has made the country one of the richest in Africa. The reason for the poverty is the disparities between rural and urban areas, domestic corruption, and the influx of refugees. During the 1990s Guinea harbored as many as half a million refugees from Sierra Leone and Liberia, which was more refugees than any other African country. In the early 2000s the people living at the border to Sierra Leone had to relocate after repeated cross-border attacks from various government and rebel forces, as well as anti-refugee violence.

Another internal challenge is human trafficking. The group at most risk is Guinean children. The girls are sold into domestic servitude and commercial sexual exploitation, whilst the boys are sold as street workers and street vendors, shoe shiners, or miners.

ABOUT THE PUBLIC HEALTH ISSUE

A public health issue in Guinea is the high risk of getting major infectious diseases. One of the most common death causes among the population is malaria which stands for around 10 percent. Malaria is a vector borne disease, which means that living organisms that can transmit infectious diseases between humans or from animals to humans, spread malaria. Mosquitoes ingest disease-producing microorganisms while feeding from an infected host, then when they are feeding again, they inject it into a new host.

In Guinea, children under 5 years old are particularly susceptible to the infection and less likely to heal. 70 percent of all malaria deaths occur in this age group. Other groups that are high risk are infants, pregnant women, patients with HIV/AIDS, and migrating people (travelers) that are non-immune. The incidence of malaria was 367.8 per 1,000 people at risk year 2015. Other risk factors are poverty and lack of education, which can lead to less access to healthcare, and that the people are unaware of risk factors. For instance, the risk in not taking medicine, and being outdoors between dusk and dawn (especially in rural areas) when the transmission is most active.

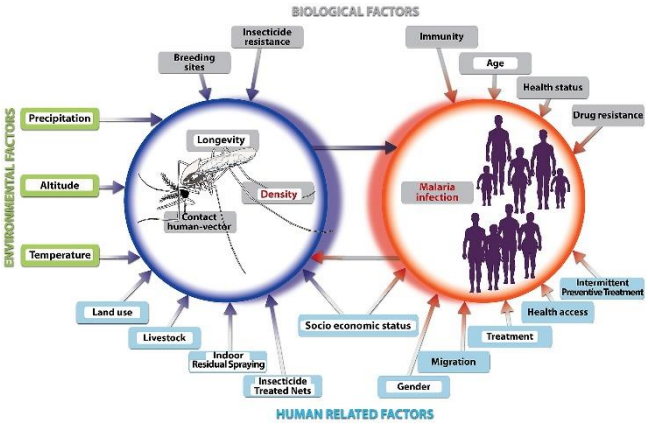

Figure 2 describes biological, environmental and human related factors that affect transmission and the disease severity of Malaria. (WHO)

DIAGNOSIS, PREVENTION, AND TREATMENT

Symptoms of malaria usually appear about 1 to 3 weeks after the infection. The symptoms are abdominal pain, chills and sweats, diarrhea, nausea, and vomiting, high fevers, low blood pressure causing dizziness, muscle aches, and poor appetite. Later symptoms are anemia caused by the destruction of infected red blood cells, kidney and liver failure, breathing problems caused by pulmonary, and coma. These complications can lead to death directly and indirectly by making the person with the condition not able to work, which can lead to starvation. This makes the poverty an important factor that affects the outcome of the condition. Early diagnosis and treatment of malaria reduces disease and prevents death.
It also contributes to reducing malaria transmission.

Insecticide-treated mosquito nets (ITNs) are the most effective prevention interventions and preferred in public health programs. In most settings, WHO recommends the net coverage for all people at risk of malaria. The most cost-effective way to achieve this is by providing ITNs free of charge, to ensure equal access for all. WHO states that everyone who lives where malaria is present, needs to sleep under the nets and keep them maintained. However, in the year 2012, only 26 percent of the people at most risk had access to the bed nets 26 percent. Other prevention interventions are indoor spraying with residual insecticides and use of antimalarial drugs, but these are more expensive and harder to address to the entire

SUGGESTION FOR INTERVENTION

The intervention that organizations like WHO work with is mostly within prevention and protection. I would suggest a promotion of healthier behavior by addressing the education. Only 45.1 percent of the population was literate the year 2014. The lack of education is a social determinant that is crucial for the Guinean´s health. The population needs to understand what causes the infection, risk factors and how to avoid exposure. If infected, they need to understand the importance in seeking help. However, I am aware that educated people that are informed and know that they need healthcare can be prevented to seek it due to poverty, lack of transportation and infrastructure. This is a problem, but the education could at least make them avoid some of the risk factors which can decrease the transmission and make them less vulnerable.

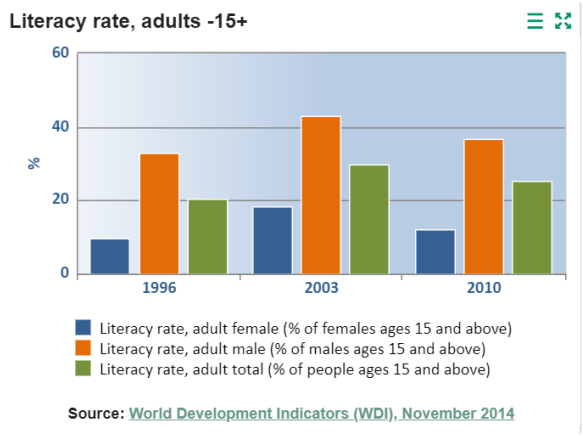

Figure 3 describes the literacy rate for the Guinean population 15 years or older. (WDI)

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