

Hcs 245 culture and disease paper

[Health & Medicine](#), [Disease](#)



Culture and Disease Paper - Malaria Erin E. Nelson HCS 245 September 5, 2011 Andrea Dale Culture and Disease Paper - Malaria It tropical and sub-tropical climates temperature, humidity, and rainfall work together to create a breeding ground for mosquitoes. Mosquitoes are a host for communicable diseases one in particular is called malaria. Malaria is a parasitic disease that infects a particular type of mosquito, Anopheles mosquitoes, which feeds on humans. People who get malaria are typically very sick with high fevers, shaking chills, and flu-like illness.

Although malaria can be a deadly disease, illness and death from malaria can usually be prevented (Global Health- Division of Parasitic Diseases , 2010) Individuals living in climates that support the life cycle of these mosquitoes are more at risk than those who do not. If temperatures fall below 68 degrees Fahrenheit the mosquitoes cannot complete their growth cycle. Africa, parts of South America and Asia have incurred the majority of the malaria epidemic (Global Health - Division of Parasitic Diseases , 2010).

In this paper I will cover: populations vulnerable to malaria, factors that make these populations vulnerable, modes of transmission, methods used to control the spread of malaria, the role of social/cultural influences and share community health promotion and wellness strategies. In particular young children and pregnant women are more at risk for contracting malaria.

Young children have not built up or acquired immunity to the disease and without immunity infections are more severe and life threatening (The World Health Organization Staff, 2010). More than 40% of the world's children live in places where malaria is a constant threat. Most children die from malaria because they do not get effective treatment" (Episcopal Relief and

Development Staff, 2009). Pregnant women have compromised immune systems due to the pregnancy leaving them at risk. Also individuals suffering from other diseases such as HIV, malnutrition and anemia are vulnerable (Global Health - Division of Parasitic Diseases , 2010). The parasite that causes malaria infects two hosts: the female Anopheles mosquitoes and humans (Global Health - Division of Parasitic Diseases , 2010).

The mosquito is essentially unharmed, unscathed, from the parasite but acts as a vector and transmits the disease from human to human each time it feeds. The parasites are found in the mosquitoes' salivary glands; it injects the saliva when feeding, and passes the parasite on to its " meal". While the parasite is in humans it moves through the blood where its transferred to the liver. The parasite makes a home in the human's liver and in the red blood cells it grows. The life cycle continues in each red blood cell, destroying them and creating daughter parasites (Global Health - Division of Parasitic Diseases , 2010).

In order to control the spread of malaria scientists created antibiotics to cure the ailment to help minimize the spread of the disease. Chloroquine was the first antibiotic created by german scientist, Han Andersag, in 1946. A German chemistry student, Othmer Zeidler, synthesized DDT (Dichloro-diphenyl-trichloroethane) in 1874 but the insecticide properties were not discovered until 1939 (Global Health - Division of Parasitic Diseases , 2010). It was used by soldiers to keep mosquitoes away so they would not contract typhus and malaria will on the battle field. The CDC (Communicable Disease Center) was created as a new component of the U.

S. Public Health Service and has been working to combat Malaria since 1946. The new center was the direct successor of the Office of Malaria Control in War Areas, an agency established in 1942 to limit the impact of malaria and other vector-borne diseases (Global Health - Division of Parasitic Diseases , 2010). Another mode of prevention is proper medication and insecticide while traveling in areas that are highly saturated in mosquitoes and reported cases of malaria. " Every year, millions of US residents travel to countries where malaria is present (Global Health - Division of Parasitic Diseases , 2010).

About 1, 500 cases of malaria are diagnosed in the United States annually, mostly in returned travelers" (Global Health - Division of Parasitic Diseases , 2010). Malaria risk is not distributed homogeneously throughout all countries. Some destinations have malaria transmission occurring throughout the whole country, while in others it occurs in defined pockets so the traveler should be weary of areas whose climate is conducive to mosquitoes. The WHO Global Malaria Programme is responsible for evidence-based policy and strategy formulation, technical assistance, capacity building, malaria surveillance, monitoring and evaluation, and coordination of global efforts to fight malaria. WHO is also a co-founder and hosts the Roll Back Malaria partnership, which is the global framework to implement coordinated action against malaria (The World Health Organization Staff, 2010). The CDC participates actively in global malaria efforts through work with the WHO, Roll Back Malaria Partners, UNICEF, and more in the fight to keep the epidemic at bay (Global Health - Division of Parasitic Diseases , 2010). Conclusion

Malaria is a very contagious parasite transmitted through mosquitoes to humans. Those at risk are individuals living in areas conducive to the breeding of mosquitoes, especially those that allow the mosquitoes to complete their growth cycle. Everyone is at risk especially with the numbers of travelers increasing the risk of the traveler bringing it home to the states is probable. Preventable measures have been created such as DDT in insect repellent and antibiotics. The epidemic has ceased in the States but continues to be a problem in Africa and Asia.

References Episcopal Relief and Development Staff. (2009). Malaria FAQs. Retrieved September 3, 2011, from NETSFORLIFE: <http://www.netsforlifeafrica.org/malaria/malaria-faqs> Global Health - Division of Parasitic Diseases . (2010, February 28). Malaria. Retrieved September 3, 2011, from Centers for Disease Control and Prevention: <http://www.cdc.gov/malaria/about/disease.html> The World Health Organization Staff. (2010, April). Malaria Center. Retrieved September 3, 2011, from World Health Center: <http://www.who.int/mediacentre/factsheets/fs094/en/index.html>