Silent Killer – Malaria

Writer’s Name

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Malaria is a silent killer disease, a scourge in hiding. Majority of malaria related deaths occur in Africa and Southeast Asia. It is preventable and treatable yet is known as the biggest cause of mortalities worldwide. Mosquitoes are not restricted by borders rather they can migrate to and spread disease at places no one has ever thought of. Thus it is a global concern to diagnose, treat and prevent malaria. It is a centuries long old disease and mankind has suffered drastically by malaria epidemics. The studies of this disease document back to Chinese literature from 2700BC, Mesopotamia from 2000BC, Egypt from 1570BC and Hindu texts from 600BC. But all these centuries, malaria was regarded as a disease caused by miasmas. But the discovery of bacteria in 1676 and advancement of germ theory of infection in 1878-79, incurred the research for finding the cause of malaria. This study picked up pace when parasites were discovered in 1880 and the formulation of theory that mosquitoes could play as vectors in birds and humans from1898 to 1900 (Cox). It is imperative as disciples of science to understand the development, life cycle and transmission pattern of the disease. It is of grave concern that though malaria is curable and can be prevented, yet it spreads out in sporadic events worldwide.

The first significant and notable incidents of malaria outbreak that shook the entire United States premier and medical researchers was during Civil War. Hundreds and thousands of soldiers fell to malaria and also spread the disease in the entire continent. It is said that malaria arrived from African rain forests to the Mediterranean, east to the Crescent and north to Greece, then Greek colonists carried it to Italy and then Roman cavalries brought it to England and Denmark. America had no records of incidence of malaria until the New World immigrants, colonists and African slaves arrived. After the first outbreak, until hydroelectric power and developments in the rural south by the 1930s, malaria had exhausted physical and financial health of the whole region. But once again, malaria reclaimed concern during World War II. More infantries lost to malaria than to enemies. That is when American government intervened and Centers for Disease Control and Prevention (CDC) was established (Panosian and Gelband).

After the loss of thousands of US troops from malaria in Africa and South Pacific, the public health service started its research on the development and utilization of synthetic antimalarial drug Quinine and residual insecticides DDT. Scientists made huge stride in their efforts for controlling malaria and yellow fever. The United States Public Health Service (USPHS) conducted investigations and activities for reducing the rate of incidence of malaria. The Tennessee Valley Authority (TVA) took control of establishment of hydroelectric power project and improving land and spillways for development of remote region. They organized an effective program for controlling malaria and by 1947, malaria was eliminated from the region. Breeding sites of mosquitoes were removed by water levels control system and application of insecticides. CDC mainly worked on the complete eradication plans of malaria after the successful reduction of malaria incidence. Then they started designing projects for monitoring, prevention and medical support both nationally and globally. As part of the National Malaria Eradication Program, house spray applications were made and by 1951, it was stated that malaria had completely been eradicated from the United States. Currently, these public health organizations are conducting research programs based on revised interventions, surveys and statistical analysis. Field based investigations help in developing strategies for understanding dynamics of malarial transmissions, emergence, drug resistance pattern and immune responses. CDC has established its research laboratories worldwide to eradicate the evil once and for all (“CDC - Malaria - About Malaria - History”).

The latest report of the World Health Organization published in November 2018, 219 million cases of malaria were reported in the year 2017 and the estimated malaria based mortality stood at 435,000 (“Fact Sheet about Malaria”). Approximately 1700 cases of malaria are reported each year in United States according to the recent CDC report. The latest malaria outbreak which is an epidemic, took place in the start of the year 2019 in Burundi where over 5.7 million people, almost half of the population, have caught the malarial infection (Lok and Dijk). There is currently 164% increase in the cases reported in the 29th week of 2019. Burundi is a non-coastal country amidst the African Great Lakes area at the conversion of East and Central Africa. This outbreak hasn’t been yet reached to United Stated but the Government has implemented a pre-departure vaccination program, travel medications and counselling program. The US diplomats working in Burundi are subjected to many limitations for receiving emergency services (Reiter). Keeping in view the historical facts and current incidence rates of malaria, it is very important for all the health organizations to come together and work on the prevention and eradication of malaria.

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