**MALARIA CARE: INTEGRATION IN NURSING CURRICULA**

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**URGENT NEED TO DEVELOP CULTURALLY COMPETENT EVIDENCE-BASED BEST PRACTICE MALARIA CARE IN NURSING CURRICULA**

It is essential that nursing students be taught about malaria.

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**MALARIA EPIDEMIOLOGY**

- The malaria parasite, Plasmodium falciparum, remains the leading cause of sickness and death in developing countries.
- Yearly, over 500 million people are infected, including 1 billion children in Africa.
- Malaria causes 1.5 million deaths globally, 3.3 billion new episodes, 655 million clinical attacks, 300 million cases of anemia, and 500,000 deaths annually.
- Global climate change will exacerbate the prevalence of malaria.
- Global warming is predicted to increase risk areas.
- Burden of malaria affects a country’s health, economic, and political state.
- The female Anopheles mosquito, the disease vector, requires calm water and food. Although males prefer nectar, females prefer human blood.
- Prevention challenges include the complicated parasite lifecycle and global disease morbidity.

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**EVIDENCE-BASED BEST PRACTICE PREVENTATIVE MEASURES**

- Use of insecticide-treated nets while sleeping (ITN).
- Intermittent room spray (IRS).
- Intermittent anti-malarial drugs during 2nd and 3rd trimester of pregnancy (IPTp).
- Accurate diagnosis and prompt treatment with artemisinin-based combination therapy (ACT).
- Proper chemoprophylaxis: Preventative for travelers
  - Use of non-expired medications
  - Adequate dosage
  - Prompt treatment in active disease.
- Personal insect repellent of 50% DEET.
- Protective clothing—dusk to dawn.
- Decrease environmental breeding areas: elimination of standing water in living areas.

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**MALARIA SIGNS AND SYMPTOMS**

- Classic symptoms: cyclical shivering, fever, headaches, vomiting, seizures in children.
- Common symptoms: chills, sweats, nausea, body aches, general malaise, enlarged spleen and liver, anemia.
- Severe symptoms: miscarriage, coma, death.
- Treatment within first 24 hours greatly increases potential for full recovery.

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**MALARIA PREVENTION IN THE U.S.**

U.S. remains a habitat for the Anopheles mosquito.
- Global climate change will
  - affect the incidence and distribution of infectious disease;
  - bring the threat of malaria to the population of the U.S.
- Global travel and humanitarian aid work have
  - increased malaria incidence among patients seen in U.S. healthcare settings.
- Healthcare staff MUST be prepared to:
  - recognize symptoms, promptly treat, and provide evidence-based culturally competent education and care.

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**CURRENT GLOBAL MALARIA OCCURRENCE**

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**GLOBAL AWARENESS AND OUTREACH**

- Worldwide communication and interdisciplinary communication, especially among healthcare personnel, are vital.
- Global Imperatives: Malaria prevention
  - Malaria treatment
  - Blood net distribution.
- Malaria prevention, treatment, education, and net distribution in urban and rural areas.
- In sub-Saharan Africa, P. falciparum malaria requires preventative treatment in combination with medication.
- Centers for Disease Control recommends basic preventive measures for a global traveler to malaria risk areas.
- Malaria-induced infant and child anemia-related blood transfusions leads to 40% of pediatric HIV occurrences in Africa.
- Continued research is necessary to combat the staggering morbidity and mortality of malaria.

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**FUTURE OF CULTURALLY COMPETENT CARE**

Researchers and institutions worldwide collaborate to seek preventative measures and treatment for sufferers that include:

- Vaccine research
- New medications for drug resistant endemic areas
- Understanding the material disease process
- Research for evidence-based prevention measures
- Global funding dispersion for prevention and research
- Behavior Change Communication

Future nursing research is needed to:

- Explore strategies to develop culturally competent nursing education curricula
- Assess dissemination of information about malaria within nursing curricula
- Provide direction for nurse educators to best prepare future nurses to offer malaria care.