**Explanation of the Variables**

**Continuous Variables:**

age: Age of the individual.

income: Annual income of the individual.

temperature: Average temperature of the area.

rainfall: Average rainfall in the area.

Mosquito density: Density of mosquitoes in the area.

Distance to health facility: Distance to the nearest health facility.

Bed net usage: Percentage of bed net usage in the household.

Education years: Number of years of education.

Household size: Number of people in the household.

Urbanization rate: Percentage of urbanization in the area.

**Categorical Variables:**

gender: Gender of the individual (male or female).

occupation: Occupation of the individual.

Housing quality: Quality of housing (poor, average, or good).

Access to clean water: Access to clean water (yes or no).

Sanitation facilities: Quality of sanitation facilities (poor, average, or good).

region: Geographical region (north, south, east, or west).

Vaccination status: Whether the individual is vaccinated (yes or no).

Insecticide treated nets: Whether insecticide-treated nets are used (yes or no).

Malaria history: History of malaria infection (yes or no).

Health insurance: Whether the individual has health insurance (yes or no).