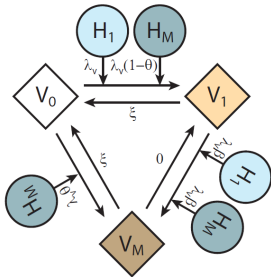


The diagram illustrates a three-state system with states H_0 , H_1 , and H_M . Transitions and their associated rates are as follows:

- $H_0 \rightarrow H_1$ with rate λ_H (influenced by V_1).
- $H_1 \rightarrow H_0$ with rate $\lambda_H(1-\phi)$ (influenced by V_M).
- $H_0 \rightarrow H_M$ with rate γ (influenced by W_1).
- $H_M \rightarrow H_0$ with rate γ (influenced by W_M).
- $H_1 \rightarrow H_M$ with rate α (influenced by W_1).
- $H_M \rightarrow H_1$ with rate α (influenced by W_M).

External inputs are represented by diamonds (V_1, V_M) and squares (W_1, W_M).



A scatter plot showing the relationship between Prevalence (x-axis, 0.0 to 0.4) and Fraction (y-axis, 0.0 to 0.4). The plot includes data points for Asia countries (open circles) and Africa countries (crosses). Two theoretical curves are shown: a blue line for 'Mixed infection' and an orange line for 'Sib-infection'. The 'Sib-infection' curve starts at a high fraction for low prevalence and decreases as prevalence increases. The 'Mixed infection' curve starts at a low fraction for low prevalence and increases as prevalence increases. Data points for both regions generally follow the trends of these curves, with some scatter.