

# Effect of malaria on productivity in a workplace: the case of a banana plantation in Zimbabwe

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#### Abstracts

Background: Malaria is known to contribute to reduction in efficiency through absenteeism as worker-hours are lost thus impacting company productivity and performance. This paper analysed the impact of malaria on efficiency in a banana plantation through absenteeism.

Methods: This study was carried out at Matanuska farm in Burma Valley, Zimbabwe. Raw data on absenteeism was obtained in remembrance from the Farm Manager. Malaria infection was detected using malaria Rapid Diagnostic Test. Measures of absence from work place were determined and included; incidence of absence (number of absentees divided by the total workforce), absence frequency (number of malaria spells), frequency rate (number of spells divided by the number of absentees), estimated duration of spells (number of days lost due to malaria), severity rate (number of days lost divided by number of spells), incapacity rate (number of days lost divided by the number of absentees), number of absent days (number of spells times the severity rate), number of scheduled working days (actual working days in 5 months multiplied by total number of employees), absenteeism rate.

Results: A total of 143 employees were trailed up over a 5-month period. Malaria positivity was 21%, 31.5%, 44.8%, 35.7% and 12.6% for January 2014 to May 2014, respectively. One spell of absence [194 (86.6%)] was common trailed by 2 spells of absence [30 (13.4%)] for all employees. Duration of spells of absence due to malaria ranged from 1.5 to 4.1 working-days, with general workers being the most affected. Incidence of absence was 143/155 (93.3%), with total of spells of absence of over a 5-month period totalling 224. The frequency rate of absenteeism was 1.6 with severity rate of absence being 2.4 and incapacity rate was 3.7.

Conclusion: Malaria contributes significantly to worker absenteeism. Employers, therefore, ought to put measures that protect workers from malaria infections. Protecting workers can be done through malaria educative campaigns, providing mosquito nets, providing insecticide-treated work suits, providing repellents and partnering with different ministries to ensure protection of workers from mosquito bites.



Keywords: Malaria, Absenteeism, Productivity, Agriculture

## Biography:

Akim Tafadzwa Lukwa is a seasoned health economist conversant with research ethics and application of different concepts across disciplines majoring with Econometrics, Statistical analysis, Mathematical modelling, Quantitative and Qualitative analysis. The exposure he had research career has enabled me to create models applying quantitative and qualitative analysis techniques into data. And he had several publications in peer reviewed journals which he have collaborated with cadres from diverse disciplines.

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