



PRESS STATEMENT

PNG MEDICAL SYMPOSIUM 2012

IMR25/12
6 September 2012

MALARIA: HOW LONG DO TREATED BEDNETS LAST?

Bednets treated with insecticide have been distributed throughout Papua New Guinea since 2004 as part of the country's malaria control program. Many homes have them, many sleep safely under them, but how long do treated bednets last?

Michelle Katusele from the PNG Institute of Medical Research in Madang, worked on a study looking at the effectiveness of Long Lasting Insecticide Treated Nets (LLINs). The National Department of Health will use the results to refine their national bednet distribution program.

"The study found that treated bednets perform best for the first two years of usage but that other factors, such as the method and number of times nets are washed, have an effect," Ms Katusele said.

"To conduct our study, we visited various PNG villages in 2008-09 and collected used bednets and information about net usage," she said.

"We tested selected nets to see how much insecticide they retained. We exposed two to five day old female mosquitoes (*Anopheles farauti*) to these nets, noting how many mosquitoes were knocked down within 60 minutes and how many died within 24 hours."

"Preliminary results show that the amount of insecticide (deltamethrin) present in the bednet drastically decreased after two years of ownership, but we also observed that the number of times the net had been washed played a major role in reducing its effectiveness.

"Mosquito knockdown rates were high (more than 80%) regardless of the age or insecticide content of bednets tested. However the mosquito death rate was highest for those nets with the highest insecticide content, fluctuating depending how often the net had been washed," Ms Katusele said.

The work was part of the PNG Malaria Control Programme supported by the Global Fund to Fight AIDS Tuberculosis and Malaria

Symposium Paper: Evaluation of used bednet efficacy on anopheline mosquitoes in PNG.

Contributors: Katusele M¹, Gideon G², Hetzel M², Siba PM², Reimer LR¹.

Institutions: ¹PNG Institute of Medical Research, Madang, ²PNG Institute of Medical Research, Goroka.

Media contacts: Geraldine Vilakiva – phone: (+675) 532 2800 or (+675) 7205 6686
Email: geraldine.vilakiva@pngimr.org.pg Or phone Wendy Levy - +675-7201 7264