

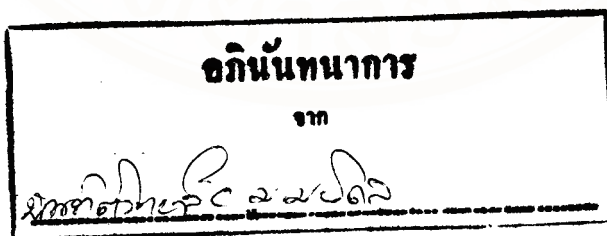
31 AUG 1992

**SOCIODEMOGRAPHIC AND BEHAVIORAL DETERMINANTS OF MALARIA  
IN CAMARINES NORTE, PHILIPPINES**

**LEONARD I. ORTEGA**

*V*

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE  
(MEDICAL EPIDEMIOLOGY)



IN

FACULTY OF GRADUATE STUDIES  
MAHIDOL UNIVERSITY

1992

19345

Thesis Title Sociodemographic and Behavioral  
Determinants of Malaria in Camarines  
Norte, Philippines

Name Leonard I. Ortega

Degree Master of Science (Medical Epidemiology)

Thesis Supervisory Committee

Wijitr Fungladda, M.D., D.T.M.&H., Dr.P.H.  
Dwip Kitayaporn, M.D., D.T.M.&H., Dr.P.H.  
Pratap Singhasivanon, M.B.B.S., D.T.M.&H  
Dr.P.H.

Date of Graduation 21 May B.E. 2535 (1992)

## ABSTRACT

A health center-based unmatched case-control study was conducted to determine the sociodemographic and behavioral determinants of malaria in Camarines Norte province, Philippines. One hundred and forty-four newly diagnosed malaria cases (*P. vivax*, 55.6%; *P. falciparum*, 43.7% and mixed infection of these two species, 0.7%) and 238 non-malaria controls were included in this research. Age was restricted to 15 years old and above and frequency matching by gender was done. Exposure status was determined through interview with the aid of pre-tested interview schedule.

Majority of both cases and controls were young, married, males, with low education and low family income.

Logistic regression analysis showed that after having simultaneously controlled the effects of other variables, malaria was significantly associated with poor housing condition (OR = 2.57; 95% C.I. 1.56;4.21); gold miners (OR = 2.08; 95% C.I. 1.30;3.33); never used bednets (OR = 2.27; 95% C.I. 1.31;3.94); migrants from outside of the province (OR = 2.09; 95% C.I. 1.20;3.64); and those who frequently slept outdoor/verandah (OR = 2.25; 95% C.I. 1.07;4.75). The sociodemographic variables associated with irregular use of bednets were marital status (single), poor housing condition, gold miners and location.

The overall knowledge and attitude scores were relatively fair to good. However, data revealed that misconceptions about malaria transmission are still rampant in spite of the fact that health education has been (and is still) a component of malaria control program ever since.

In the light of the results of this study as well as the findings in other studies cited herein, it is recommended that thorough epidemiological studies be conducted in other parts of the Philippines and review the effectiveness of the current malaria control strategies in a given endemic area taking into account the epidemiological factors that affect malaria transmission.