

**Comparative Analysis of Malaria Cases Visiting Government
and Private Health Facilities at 3 VDCs of Siraha District**



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KIRTIPUR, KATHMANDU, NEPAL**

RECOMMENDATION

This is to recommend that the dissertation entitled “**Comparative Analysis of Malaria Cases Visiting Government and Private Health Facilities at 3 VDCs of Siraha District**” has been carried out by **Mr. Indrajit Lal Karn** for the partial fulfillment of **M.Sc.** degree in Zoology with special paper **Parasitology**. This work was conducted under our supervision. To the best of our knowledge, this dissertation work has not been submitted for any other degree.

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DECLARENCE

I hereby declare that the work presented in this dissertation has been done by myself and has not been submitted else where for the award of any degree. All sources of information have been specifically acknowledged by references to the authors or institutions.

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ABSTRACT

The present study was conducted from August 2007 to October 2008 to compare the malaria cases between government and private health facilities at 3 VDCs (Kalyanpur Jabdi, Itari Parsahi and Bishnupur Pra. Ra.) of Siraha district. These VDCs lie in the region of Eastern Nepal. The study was carried out by observing about 150 malaria probable cases at each 3 VDCs which were registered in both government and Private health facilities. Thus the total of 450 probable malaria cases were observed from the study area of which 209 cases from the government health facilities and 241 cases from the private health facilities. The questionnaire method was also used to assess the socio-economic status in relation to malaria. Out of 209 probable malaria cases, there was no infection of malaria in the government health facilities whereas 14(5.80%) cases were found to be positive in the private health facilities from 241 probable malaria cases. The positivity rate was found to be 3.11% of the total samples. In private health facilities, 13 cases were of *P. vivax* (2.88%) and 1 case (0.22%) of *P. falciparum* of the total samples. In private health facilities the age wise data revealed that the total infected population, the highest positivity rate was found in (41-50) year's age group (7.14%). Similarly in relation to sex, the positivity rate was 2.44% in males and 0.22% in females of the total samples. The malaria was found to be higher in poor (2%) and (1.11)% in moderate class of total samples. The malaria infection was found to be higher in Hindu 2.88% and lower in Muslims 0.22% of total samples. Likewise malaria infection was higher in illiterate 1.55%, occupation wise malaria was found highest in farmers 1.11% and no infection among job holders 0% of total samples. The visiting rate of patients was found to be higher in private health facilities (50.88%) than in government health facilities (49.11%). The slide method diagnostic tools were observed to be used in government health facilities while antigen detector RDTs method was applied by private health facilities to confirm malaria. The medicines for malaria prescribed by both government and private health facilities were Chloroquine, Primaquine, Amoxicillin and Ciprofloxacin of some Nepalese and Indian Companies.

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LIST OF ACRONYMS

°C	= Degree Celsius
AL	= Antilargine
API	= Annual Parasitic Incidence
CQR	= Chloroquine Resistance
DDT	= Dichloro Diphenyl Trichloro Ethane
DOHS	= District Office of Health Services
DPHO	= District Public Health Office
EDCD	= Epidemiological Disease Control Division
ELISA	= Enzyme Linked Immunosorbent Assay
GDP	= Gross Domestic Product
GFR	= Glomerular Filtration Rate
GIS	= Geographical Information System
Gov	= Government
IDS	= Intradermal Smears
ITN	= Insecticide Treated Nets
MD	= Doctor of Medicine
MOH	= Ministry of Health
NTA	= Non Transmission Area
P	= <i>Plasmodium</i>
PB	= Peripheral Blood
PF	= <i>Plasmodium falciparum</i>
Pra. Ra.	= Praganna Rampur
PV	= <i>Plasmodium vivax</i>
Pvt	= Private
RBM	= Roll Back Malaria
RDTs	= Rapid Diagnostic Tests
SEARO	= South East Asia Regional Office
SPR	= Slide Positivity Rate
TA	= Transmission Area
UNDP	= United Nations Development Project
UNICEF	= United Nations Children Education Fund
US \$	= United States Dollar
VBDRTC	= Vector Borne Disease Research Training Center
VDC	= Village Development Committee
WHO	= World Health Organization
WTP	= Willingness to Pay