



**OCCURRENCE AND RISK FACTORS ASSOCIATED WITH
TOXOPLASMA GONDII INFECTION IN PATIENTS FROM SELECTED
HOSPITALS IN DAVAO CITY, PHILIPPINES**

An Undergraduate Research Presented to the
Faculty of the Biological Sciences Department

College of Science

De La Salle University - Dasmariñas

Dasmariñas, Cavite

In Partial Fulfilment of the Requirements
for the Degree of Bachelor of Science Major in Human Biology

John Henry M. Amper

Steven Paulo C. Salibay

March 2012



ABSTRACT PAGE

The occurrence of *T.gondii* infection was studied in patients from selected government and private tertiary hospitals in Davao City, Mindanao. Ninety-four (94) patients were bio-assayed using LATEX Agglutination test kit to serologically test them for anti-*T.gondii* antibodies (Ab). The result showed that 34 (36.17%) patients were sero-positive for anti-*T.gondii* Ab. Among the 51 female infected individuals 20 (39.22%) were pregnant. The occurrence of *T. gondii* infection was observed to significantly increase ($p<0.05$) in aged group 21-30, and blood type O. Individuals with normal BMI and those with blue collar jobs and unemployed also showed increased ($p<0.05$) infection. Cat exposure and sex however, did not show any significant association ($p>0.05$) with *T. gondii* infection. In conclusion, *T. gondii* infection is associated with young adult individuals, exposed to a particular occupation and physiologic condition. Although *Toxoplasma gondii* infection suggests possible association with particular physiologic conditions, age and occupation, it is recommended that further studies on this aspect be done to provide more basic and clinical research information that would improve health management.



TABLE OF CONTENTS

Title Page	1
Approval Sheet	2
Abstract	3
Acknowledgment	4
Table of Contents	6
1.0 INTRODUCTION	
1.1 Background of the Study	8
1.2 Theoretical Framework	10
1.3 Statement of the Problem	13
1.4 Hypotheses	14
1.5 Scope and Limitation	14
1.6 Significance of the Study	15
2.0 RELATED LITERATURE	
2.1 Conceptual Literature	16
2.2 Related Literature	19
3.0 METHODOLOGY	
3.1 Research Design	21
3.2 Research Setting	21



3.3 Research Procedure	21
3.4 Data Gathering and Statistical Treatment	25
4.0 RESULTS AND DISCUSSION	
4.1 Results	26
4.2 Discussions	30
5.0 CONCLUSIONS AND RECOMMENDATIONS	
5.1 Conclusions	36
5.2 Recommendations	37
6.0 REFERENCES	38
7.0 APPENDICES	
A: Life cycle of <i>Toxoplasma gondii</i>	43
B: Map of Davao	44
C: Survey Forms	45
D: Body Mass Index (BMI) Range	47
E: Serologic Test Results	48
F: Gantt Chart	49
G: Budgetary Requirement	50
CURRICULUM VITAE	51