COST – EFFECTIVENESS AND COST – BENEFIT ANALYSES OF USING PERMETHRIN IMPREGNATED BEDNETS COMPARING WITH UNTREATED BEDNETS IN PREVENTING MALARIA IN LONGAN AND SONGBE, VIETNAM



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The goal of this study is to compare the cost - effectiveness, cost - benefit of two measures (Permethrin impregnated bednets and untreated bednets) in two provinces: Long An (representating coastal region), and Song Be (representating forest region).

In Long An province (Tan Tap and Long Huu Dong communes) 250 households or 1,338 persons used Permethrin treated bednets while 271 households or 1,342 persons used untreated bednets. In Song Be province (Thong Nhat and Nghia Trung communes) 253 households or 1,318 persons used Permethrin treated bednets while 267 households or 1,331 persons used untreated bednets. After one year using Permethrin treated bednets with a dosage of $0.2g/m^2$, twice a year, the results showed that the Permethrin impregnated bednets program was more effective as well as more cost - effective than untreated bednets in these places, and the benefit was also greater than cost in both provinces. B/C in Long An was 6.48 while B/C in Song Be was 7.77. And if the number of malaria episodes is used instead of number of people affected, the B/C ratio was higher: 9.09 in Long An and 10.58 in Song Be.

Effectiveness of Permethrin treated bednet measure also depends upon some other factors, for example, habit of sleeping in bednet and nature of work. Treated bednets do not significantly improve the disease rate when low proportion of people sleep in bednet or large proportion of people have to work outdoors.

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TABLE OF CONTENTS

		page
ABTRAC'	TS	ii
ACKNOV	VLEDGEMENTS	iii
TABLE O	F CONTENTS	iv
LIST OF	FIGURES	vi
LIST OF	TABLE	vii
Chapter 1	INTRODUCTION	1
1.1	Problem Statement and Rationale	1
1.2	Objective	8
Chapter 2	LITERATURE REVIEW	9
2.1	Effectiveness of Permethrin Impregnated Bednets	9
2.2	Cost of Permethrin Treated Bednets	10
2.3	Cost -Effectiveness of Permethrin Treated Bednets and	12
	Untreated Bednets Permethrin Treated Bednets	• •
Chapter 3	RESEARCH METHOD	13
3.1	Operational Definitions.	13
3.2	Conceptual Famework.	20
3.3	Research Methodology	22
Chapter 4	RESULT	27
4.1	Effectiveness of Permethrin Treated Bednets	27
4.2	Cost Calculations.	29
4.3	Cost - Effectiveness and Cost - Benefit Analyses	32
4.4	Sensitivity Analysis	37

5.1 Effectiveness of Two Measures 39 5.2 Cost 41 5.3 Cost - Effectiveness and Cost - Benefit of Two Measures in Preventing Malaria Disease 42 Chater 6 CONCLUSIONS AND RECOMMENDATIONS 45 6.1 Conclusions 45 6.2 Limitation of Study 46 6.3 Merit of Study 47 6.4 Recommendations 47 REFERENCES 49 APPENDICES 49 Appendix 1 Map 51 Appendix 2 : Malaria Related Data 57 Appendix 3 : Cost 65 Appendix 4 : Malaria services Network 78 Appendix 5 : Characteristic of Mosquitoes in Viet Nam 79 Appendix 6 : Case Definition 80 Appendix 7 : Bioassay (WHO technique) 81	Chapter 5	DIS	SCUSSION	39
5.3 Cost - Effectiveness and Cost - Benefit of Two Measures in Preventing Malaria Disease. 42 Chater 6 CONCLUSIONS AND RECOMMENDATIONS 45 6.1 Conclusions. 45 6.2 Limitation of Study. 46 6.3 Merit of Study. 47 6.4 Recommendations. 47 REFERENCES. 49 APPENDICES 49 Appendix 1 Map. 51 Appendix 2 : Malaria Related Data. 57 Appendix 3 : Cost. 65 Appendix 4 : Malaria services Network. 78 Appendix 5 : Characteristic of Mosquitoes in Viet Nam. 79 Appendix 6 : Case Definition 80	5.1	Effective	ness of Two Measures.	39
in Preventing Malaria Disease	5.2	Cost	••••••	41
Chater 6 CONCLUSIONS AND RECOMMENDATIONS 45 6.1 Conclusions	5.3	Cost - Ef	ffectiveness and Cost - Benefit of Two Measures	42
6.1 Conclusions 45 6.2 Limitation of Study 46 6.3 Merit of Study 47 6.4 Recommendations 47 REFERENCES 49 APPENDICES 49 Appendix 1 Map 51 Appendix 2 : Malaria Related Data 57 Appendix 3 : Cost 65 Appendix 4 : Malaria services Network 78 Appendix 5 : Characteristic of Mosquitoes in Viet Nam 79 Appendix 6 : Case Definition 80		in Preven	nting Malaria Disease	
6.2 Limitation of Study. 46 6.3 Merit of Study. 47 6.4 Recommendations. 47 REFERENCES. 49 APPENDICES 51 Appendix 1 Map. 51 Appendix 2 : Malaria Related Data. 57 Appendix 3 : Cost. 65 Appendix 4 : Malaria services Network. 78 Appendix 5 : Characteristic of Mosquitoes in Viet Nam. 79 Appendix 6 : Case Definition 80	Chater 6	CO	NCLUSIONS AND RECOMMENDATIONS	45
6.3 Merit of Study	6.1	Conclusi	ons	45
6.4 Recommendations. 47 REFERENCES. 49 APPENDICES Appendix 1 Map. 51 Appendix 2 : Malaria Related Data 57 Appendix 3 : Cost. 65 Appendix 4 : Malaria services Network 78 Appendix 5 : Characteristic of Mosquitoes in Viet Nam. 79 Appendix 6 : Case Definition 80	6.2	Limitatio	n of Study	46
REFERENCES	6.3	Merit of	Study	47
APPENDICES Appendix 1 Map	6.4	Recomm	nendations	47
Appendix 1 Map. 51 Appendix 2 : Malaria Related Data. 57 Appendix 3 : Cost. 65 Appendix 4 : Malaria services Network. 78 Appendix 5 : Characteristic of Mosquitoes in Viet Nam. 79 Appendix 6 : Case Definition 80	REFEREN	NCES		49
Appendix 2 : Malaria Related Data. 57 Appendix 3 : Cost. 65 Appendix 4 : Malaria services Network. 78 Appendix 5 : Characteristic of Mosquitoes in Viet Nam. 79 Appendix 6 : Case Definition 80	APPEND	ICES		
Appendix 3 : Cost	Apı	pendix 1	Map	51
Appendix 4 : Malaria services Network	App	pendix 2	: Malaria Related Data.	57
Appendix 5 : Characteristic of Mosquitoes in Viet Nam	App	pendix 3	: Cost	65
Appendix 6 : Case Definition	App	pendix 4	: Malaria services Network	78
••	App	pendix 5	: Characteristic of Mosquitoes in Viet Nam	79
Appendix 7 : Bioassay (WHO technique)	App	pendix 6	: Case Definition	80
	Apı	pendix 7	: Bioassay (WHO technique)	81

LIST OF FIGURES

Figu	res	page
1.1	Position of Permethrin Treated Bednets Measure	7
	In Malaria Prevention and Control.	
3.1	Conceptual Framework.	21
4.1	C/E ratios in Two Provinces.	34
4.2	Cost - Benefit in Two Provinces.	37

LIST OF TABLES

Tables pa		page
1.1	Malaria Expenditure from 1992- 1995 Period in Vietnam	3
1.2	Malaria Statistic in 1991 - 1995 Period.	4
2.1	Cost and Durability of Mosquito Nets in Various Countries	11
3.1	Baseline Information Between Treated and Untreated Bednets	23
3.2	Information and It's Sources	24
4.1	Comparing the Effectiveness Between Two Measures in Long An	28
	Province Based on Standard Population	
4.2	Comparing the Effectiveness Between Two Measures in Song Be	28
	Province Based on Standard Population	
4.3	Provider Cost of Two Measures in Long An Province	29
4.4	Provider Cost of Two Measures in Song Be Province	30
4.5	Patient Cost of Two Measures in Long An Province	31
4.6	Patient Cost of Two Measures in Song Be Province	31
4.7	Cost - Effectiveness Ratios in Two Provinces.	33
4.8	Cost/case for Treatment in Provider Side of Both Groups in Long An	34
4.9	Cost/case for Treatment in Provider Side of Both Groups in Song Be	35
4.10	Cost/case for Treatment in Patient Side in Both Groups in Long An	35
4.11	Cost/case for Treatment in Patient Side of Both Groups in Song Be	35
4.12	No.of Patients Avoided Due to Treated Bednets in Two Provinces	36
4.13	Cost - Benefit in Two Provinces	36

Tables (Continue)	page
A.2.1	Malaria Cases in Treated Bednet Group, Long An Province	58
A.2.2	Malaria Cases Among < 9 year old Children in Treated Bednet	58
	Group, Long An Province.	•
A.2.3	Malaria Cases in Untreated Bednet Group, Long An Province	59
A.2.4	Malaria Cases Among < 9 year old Children in Untreated	59
	Bednet Group, Long An Province.	•
A.2.5	Malaria Cases in Treated Bednet Group, Song Be Province	60
A.2.6	Malaria Cases Among < 9 year old Children in Treated Bednet	60
	Group, Song Be Province.	
A.2.7	Malaria Cases in Untreated Bednet Group, Song Be Province	61
A.2.8	Malaria cases Among < 9 year old Children in Untreated	61
	Bednet Group, Song Be Province.	•
A.2.9	Malaria Cases in Treated and in Untreated Bednet Groups,	62
	Song Be Province (ThoSon, DakNhau Communes)	•
A.2.10	Malaria Cases in Treated and in UnTreated Bednet Group,	62
	Phu Rieng Rubber Company	•
A.2.11	Anopheles Density in Long An Province.	63
A.2.12	Anopheles Density in Song Be Province	64
A.3.1	Capital Cost of Health Center in Long An Province.	66
A.3.2	Capital Cost of Health Center in Song Be Province	67
A.3.3	Cost in PermethrinTreated Bednets Group (Long An Province)	68
A.3.4	Cost in Untreated bednets Group (Long An Province)	71
A.3.5	Cost in Permethrin Treated Bednets Group (Song Be Province),	73
A.3.6	Cost in Untreated Bednets Group (Song Be Province).	76