COMPARISON OF COST-EFFECTIVENESS BETWEEN 9-MONTH ISONIAZID AND 2-MONTH RIFAMPICIN PLUS PYRAZINAMIDE FOR PREVENTION TO ACTIVE TUBERCULOSIS AMONG PEOPLE LIVING WITH HIV THAILAND

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ABSTRACT

Treatment of latent tuberculosis is needed to protect HIV-infected individuals against tuberculosis. In Thailand, 9-month Isoniazid (INH) preventive therapy among asymptomatic HIV-infected individuals are feasible and well-tolerated. However, because of problems with poor compliance due to long treatment, an alternative short-course tuberculosis preventive regimen is needed. In making a decision on which treatment should be standard, evaluating cost-effectiveness is one of the tool make informed decision to health care policy. This study proposes to assess cost-effectiveness of two difference regimen from the perspectives of hospital and patient. Cost-effectiveness ration will be expresses as cost per achieving one HIV-infected person with completed treatment in two regimens of treatment of latent tuberculosis infection; i.e., 9-month INH and 2-month Rifampicin(RFP) plus Pyrazinamide(PZA) to prevent active tuberculosis. **DESIGN**: Multi-center randomized, two-arm, open-label controlled trial. SETTING: at Day Care Center, Chiang Rai, Thailand. PATIENTS: HIV-infected person with positive tuberculin skin tests (induration ≥ 5 mm). **INTERVENTIONS**: INH daily for 9 months and RFP plus PZA daily for 2 months. MEASUREMENT: Cost will be measured from both perspectives, i.e., patient and hospital. Effectiveness will be measured in term of treatment completion. Cost-effectiveness analysis and incremental analysis will be performed. **RESULT:** The assessment of effectiveness of INH preventive therapy in term of treatment outcome was conducted for data exercise. The completion rates of INH preventive therapy from 1995-2001 in Phan, Mae Chan, Chiang Khong and Mae Sai hospital were 29.3%,

53.5%, 58.9% and 53.4% and the default rate were 55.8%, 30.8%, 37.1% and 40.8% respectively. The following factors were found to be associated with default; gender, day care membership and vear of enrollment. LESSONS LEARNED and **RECOMMENDATION:** Organizational factors in hospital could have a great impact on the treatment outcomes of IPT program. These include how the hospitals generate the program especially follow up system, availability and adequacy of existing human resources and educational and training support health staff. These factors have to be assessed and support in order to maximize the hospital's capacity to run the program before implementing the clinical trial research project. In addition, The result of this data exercise suggests that Day Care Center (DCC) might improve the completion rate of IPT. However, there is no well-established model of DCC in the study hospital, and lack of evaluation of each center. Therefore, the assessment of DCC performance and identify barriers and opportunity should be done before implementing the clinical trial research project in order to improve the completion rate of IPT and also comprehensive care for People Living With HIV/AIDS (PLWHA)

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TABLE OF CONTENTS

			Page
ABS	TRACT		iii
ACK	NOWLE	DGEMENTS	v
TAB	LE OF C	ONTENTS	vii
LIST	OF TAB	BLES	xiii
LIST	OF FIG	URES	xv
CHA	APTER I		
INTI	RODUCTI	ION	1
CHA	APTER II	ESSAY	
2.1	Introdu	ction	4
2.2	HIV ep	idemiology	5
	2.2.1	Global HIV epidemiology	5
	2.2.2	HIV/AIDS situation in Thailand	6
	2.2.3	HIV/AIDS situation in Thailand	7
2.3	TB epir	mediology	8
	2.3.1	Global TB epimediology	8

	2.3.2	TB situation in Thailand	9
	2.3.3	TB situation in Chiang Rai Province	10
2.5	TB/HIV	epidemiology in Thailand and Chiang Rai province	12
2.6	Impact of	of HIV on tuberculosis	13
2.7	Interven	tions to control tuberculosis in high HIV prevalence	13
	2.7.1	Interventions indirectly against tuberculosis	
		(Interventions against HIV)	13
	2.7.1.1	Intervention to decrease HIV transmission	16
	2.7.1.2	Antiretroviral therapy	16
	2.7.2	Interventions directly against tuberculosis	17
	2.7.2.1	Tuberculosis case-finding and treatment to ensure cure	17
	2.7.2.2	BCG immunization	17
	2.7.2.3	Preventive tuberculosis treatment	18
2.8	What is	latent TB infection?	19
2.9	What is	TB disease?	21
2.10	Risk fac	tors for developing to TB disease	23
2.11	What is	treatment of latent TB infection?	24
2.12	Who is t	he target group of treatment of latent TB infection?	24
2.13	Treatme	nt regimens of latent TB infection	26
	2.13.1	Isoniazid 9 months	28
	2.13.2	Pyrazinamide for 2 mo	28
	2.13.3	Drug side effect of treatment regimens	29

	2.13.4	Efficacy of TB preventive therapy in HIV infected persons	32
	2.13.5	Treatment regimens of Latent TB infection in Thailand	34
2.14	What is t	he key point of treatment of latent TB infection	34
	2.14.1	Diagnosis of latent TB infection	34
	2.14.2	Screening for Tuberculosis disease	37
	2.14.3	Monitor for adherence and toxicity of treatment of LTBI	38
	2.14.4	Evaluation of outcome for treatment of	
		latent tuberculosis infection	40
2.15	Why do	we need economic evaluation for	
	the treatr	ment of latent TB infection?	40
2.16	Costs an	d consequences in the economic evaluation	
	of treatm	ent of latent TB infection?	43
	2.16.1	What are the costs?	43
	2.16.2	How to measure the effectiveness?	45
	2.16.3	What is the Cost effectiveness analysis?	47
	2.16.4	What are the steps for Cost-effectiveness analysis?	47
Refere	ences		48
CHA	PTER III	PROPOSAL	
3.1	Backgro	und and Rationale of the study	56
3.2	Research	question	60

3.3	Objectiv	es	60
	3.3.1.	General Objectives	60
	3.3.2.	Specific Objectives	60
3.4	Operation	onal definition	61
3.5	Concept	rual framework	65
3.6	Research	h methodology	
	3.6.1.	Study design	67
	3.6.2.	Study population	67
	3.6.3.	Inclusion criteria	67
	3.6.4.	Exclusion criteria	67
	3.6.5	Study sites	70
	3.6.6	Study duration	72
	3.6.7	Intervention	72
	3.6.8	Sample size	75
	3.6.9	Operational procedures	74
	3.6.9.1	Enrollment, Randomization and Follow up	74
	3.6.9.2	Follow up for compliance of treatment completion	78
	3.6.9.3	Follow up for drug toxicity	78
	3.6.9.3	Loss to follow up	79
	3.6.10	Research instrument for data collection	80
	3.6.11	Data collection and management	81

	3.6.12	Plan of data analysis	82
3.7	Ethical	considerations	87
3.8	Funding	g and resource	89
3.9	Table o	f activities and schedules	90
Refe	rence		92
СНА	PTER IV	DATA EXERCISE	
4.1.	Introdu	ction	96
4.2	Objecti	ve	
	4.2.1	General objective of data exercise	97
	4.2.2	Specific objective	97
4.3	Methods	s of the study	
	4.3.1	Study design	98
	4.3.2.	Study population	98
	4.3.3	Study site	98
	4.3.4	Study duration	99
	4.3.5	Data collection	99
	4.3.6	Data analysis	100
4.4	Result		102
4.5	Discuss	sion	110
4.6	Lessons	s learned and Recommendations	111
Refer	ences		113

CHAPTER V PRESENTATION	114
CHAPTER VI ANNOTATED BIBLIOGRAPHY	121
APPENDICES	
APPENDIX I. CONSENT FORM	127
PPENDIX II. ENROLLMENT FORM of treatment of LTBI	130
APPENDIX III. FOLLOW UP FORM of treatment of LTBI	140
APPENDIX IV. WORK SHEET FOR COST CALCULATION	144
CURRICULUM VITAE	147

LIST OF TABLES

		Page
Table 2.1	TB infection vs. TB disease	20
Table 2.2	Risk factors of people with TB infection develop to TB disease	23
Table 2.3	High-Priority candidates for preventive therapy	25
Table 2.4	Recommended drug regimens for treatment of	
	latent tuberculosis infection in adults	27
Table 2.5	Medications to treat tuberculosis infection:	
	Doses, toxicity, and monitoring requirements	30
Table 2.6	Randomized clinical trial of TB preventive therapy	
	in HIV infected person	33
Table 2.7	Classifying the Tuberculin Skin Test reaction	36
Table 2.8	Measurement of costs and consequences in economic evaluation	42
Table 3.1	Karnofsky performance status	69
Table 3.2	Background of population at Day Care Center	
	in Chiang Rai province	71
Table 3.3	Sample size of completion rate of treatment	
	of LTBI requirements for comparisons of proportions	74
Table 3.4	Budget plan	89
Table 3. 5	Table of activities and schedule	90

Table 4.1	Treatment outcome of INH preventive therapy	
	against tuberculosis and factors affecting follow-up status	
	in Phan hospital, Chiang Rai,1995-2001	102
Table 4.2	Treatment outcome of INH preventive therapy	
	against tuberculosis and factors affecting follow-up status	
	in Mae Chan hospital, Chiang Rai,1995-2001	104
Table 4.3	Treatment outcome of INH preventive therapy	
	against tuberculosis and factors affecting follow-up status	
	in Chaing Khong hospital, Chiang Rai,1995-2001	106
Table 4.4	Treatment outcome of INH preventive therapy	
	against tuberculosis and factors affecting follow-up status	
	in Mae Sai hospital. Chiang Rai 1995-1999	108

LIST OF FIGURES

		Page
Figure 2.1	Cases of AIDS and symptomatic HIV infection	
	in Chiang Rai province in 1989-2001	7
Figure 2.2	Rate per 100,000 of new TB cases, Thailand 1985-1996	10
Figure 2.3	New TB rate per 100,000 persons	
	in Chiang Rai province, Thailand (1987-2000)	11
Figure 2.4	New TB rate by HIV status per 100,000 person	
	in Chiang Rai province, Thailand (1985-1996)	12
Figure 2.5	Interventions to interrupt the sequence of events	
	by which HIV fuels TB epidemic	15
Figure 2.6	Progression of TB	22
Figure 3.1	Conceptual framework(1)	65
Figure 3.2	Conceptual framework(2)	66
Figure 4.1	The percentage of default stratify by month of INH	
	preventive therapy in four hospital, Chiang Rai 1995-2001	110