

SITUATION ANALYSIS OF LABORATORY SUPPLY SYSTEM:
THE INFLUENCE OF KEY ACTORS IN CAMBODIAN
HEALTH CARE SYSTEM

Sok Khim

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Masters of Public Health
Health Systems Development Programme
College of Public Health
Chulalongkorn University
Academic Year 2001

ISBN: 974-03-0209-2

© College of Public Health, Chulalongkorn University
Bangkok, Thailand

119581270


Thesis Title : Situation Analysis of Laboratory Supply System: the influence
of Key Actors in Cambodian Health Care System

By : Sok Khim


Program : Master of Public Health (Health Systems Development)
College of Public Health


Thesis Advisor : Sauwakon Ratanawijitrasin, Assistant Professor, Ph.D.,

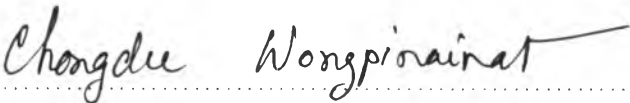
Accepted by the College of Public Health, Chulalongkorn University,
Bangkok, Thailand, in Partial Fulfillment of the Requirements for the Master's Degree

 Dean of the College of Public Health
(Samlee Plianbangchang, M.D., Dr.P.H.)

THESIS COMMITTEE

 Chairperson
(Assistant Professor Nuntavarn Vichit-Vadakan, MS., MPH., Dr. P.H.)

 Thesis Advisor
(Assistant Professor Sauwakon Ratanawijitrasin, Ph.D.)

 Member
(Chongdee Wongpinairat, Ph.D.)

 Member
(Marc Van der Putten, MPH.)

ABSTRACT

This Study deals with the issue of laboratory supplies in the Cambodian health care system. In the period of health reform transition, there is no clear system for laboratory supplies yet. Inadequate resources, inefficiency of management and the lack of coordination between internal and external stakeholders make the supplies imbalance, under utilized and high cost. These factors in turn affect the effectiveness of the performance of laboratory services.

The study aims to explore the problems of inappropriate laboratory supplies regarding quantity and condition and identifying the influencing factors in the system with more emphasis on the coordination process of the key stakeholder groups. The results revealed that the current laboratory supplies caused a major drain on health expenditure and thereby decreased the effectiveness of the performance of the laboratory services. These problems were caused by the process of improper financial allocation by the external supplier which was based on their strategic plan and practice. The other problem encountered is that the external suppliers provide advice related to modern technology, which cannot be applied to in many of the hospitals. The government financial controllers also play a role in the problem through financial allocation for health sector. The group of the Ministry of Health laboratory policy makers were involved in making the supply system inefficient through their poor coordination. The Ministry of Health laboratory planners were found to be careless with the management role of supply and the laboratory work professional did not support the system because of the effect on the income.

To solve this problem and re-orientates the laboratory supplies toward efficiency requires a profound reformed in the government and ministry of health system and mechanisms to balance the strong influencing actors on the development of laboratory services. Reformation of some policies at a level higher than the Ministry of Health could be beneficial for achieving better coordination on finances for health supplies and management of the internal resources and external resources. The Ministry of Health is required to build up the internal strength with a broad reform package in order to rationalize the policy toward donors assistance, supply management and effective performance related with the professionals activities and incentive.

ACKNOWLEDGEMENT

Firstly, I would like to acknowledge the College of Public Health, Chulalongkorn University which conducted the Master of Public Health Programme which enabled me to participate in this course, where I was able to develop my professional knowledge, and skill in the field of Public Health. Also, I wish to thank the Department of Technical and Economic Corporations of the Thai government, for the financial support given throughout my study.

My deepest gratitude and heartfelt appreciation goes out to Dr. Sauwakorn Ratanawijitrasin, my thesis advisor, who throughout my entire period of study, provided me with invaluable knowledge, guidance and words of encouragement, without which this thesis would never have seen reality.

I am grateful to Chairperson of my thesis committee, Assistant Professor Dr. Nuntavarn Vichit-Vandakan, and to the thesis committee members, Dr.Chongdee, Wongpinairat and Ajarn Marc van der Putten for many accurate comments and necessary revision in the thesis.

I owe a special word of thanks to Assistant Professor Dr. Nuntavarn Vichit-Vandakan, Mr. Herbert Raymond Haar III, and Miss. Lulu Raschid for their untiring effort and assistance in editing my thesis.

I wish to express my sincere gratitude and appreciation to all academic instructors, of Master in Public Health Program for the knowledge and experience they provided me in the field of their expertise.

I express my gratefulness to the staffs of the college of Public Health and Information Center, for all the support provided to me during the period of my study.

I would like to thank many organizations and individuals who have facilitated and supported me without whose help I would not have been able to complete my study .

My special appreciation must go to the chief of laboratory services of the Cambodian National Hospitals and National Centers, and the laboratory advisors, who very kindly participated in my study and shared information related to their work.

My sincere thank is given to my friends and colleague, for having helped me during my data collection.

Last but not least, I must say a very big thank to my family, brothers and sister for their love, moral support and helped me in numerous ways. Without which, this thesis will not be what it is today and therefore, I very humbly dedicate this thesis to my dearly beloved parents who have demised and all my family members.

LIST OF CONTENT

	Page
ABSTRACT.....	iii
ACKNOWLEDGEMENT.....	v
LIST OF CONTENTS.....	vii
LIST OF TABLES.....	xi
LIST OF FIGURES.....	xii
CHAPTER I: Introduction	
1. Introduction.....	1
2. Problem statement.....	2
3. Impact of inappropriate laboratory supplies.....	6
4. Organization background of health laboratory.....	7
4.1 Brief historical background of Health Reform System.....	7
4.2 Organization structure of laboratory services.....	8
4.3 Current situation of laboratory supply.....	12
5. The Coordination actors in the Laboratory Supply System.....	15
5.1 Government Policy Maker.....	15
5.2 Coordination Actors at The Ministry of Health.....	16
5.2.1 Coordination Committees.....	16
5.2.2 Laboratory CoCom subcommittee.....	19
5.3 MoH laboratory Unit.....	20
5.4 International Organization.....	21
6. Objective and scope of the study.....	22
6.1 Objective.....	22
6.2 Conceptual framework.....	22
6.3 Scope of the study.....	24
7. Organization of the Remaining Chapter.....	25

CHAPTER II: Literature review

1. Laboratory problem in developing countries.....	26
2. Financial resources and health actors.....	30
3. The influencing of the key actors in the health services.....	31
3.1 The bureaucracies.....	31
3.1.1 Economic planners.....	32
3.1.2 The health bureaucracies.....	32
3.2 Operational Health Managers.....	37
3.3 The health professional.....	37
3.4 The external Actors (International Donors).....	40
4. Conclusion.....	45

CHAPTER III: Methodology

1. Method of data collection.....	46
1.1 Key Informant interviewed.....	47
1.1.1 Sources.....	47
1.1.2 Selection criteria.....	47
1.1.3 Tool.....	50
1.1.4 Period of data collection.....	51
1.2 Document reviewed.....	51
2. Data Analysis.....	52

CHAPTER IV: Finding and Analysis

1. Finding.....	55
1.1 Reagent problem.....	55

1.1.1	Quality.....	55
1.1.2	Adequacy.....	58
1.1.3	High cost.....	61
1.1.4	Equipment problem.....	62
1.2	Problem of donors supply.....	64
2.	Analysis.....	67
2.1	Analysis.....	67
2.2.1	Donors advisors.....	68
2.1.2	Donors decision process.....	69
2.2	Laboratory work professionals.....	71
2.2.1	Capacity.....	71
2.2.2	Activities related incentive.....	72
2.3	Ministry of Health Coordination mechanism.....	75
2.3.1	Coordination between Ministry of Health & Government.....	75
2.3.2	The Laboratory CoCom Subcommittee.....	78
2.3.3	The Ministry of Health Laboratory officers.....	79
a)	Procurement.....	79
b)	Allocation.....	81
c)	Supervision.....	82
 CHAPTER V: Conclusion		
1.	Finding.....	83
2.	Recommendation.....	86
 CHAPTER VII : Presentation		
		91
 CHAPTER VII: Annotate bibliography.....		
		106
 REFERENCE		
		112

APPENDICES	119
Appendix A Health coverage plan, Minimum and comprehensive package of activities.....	120
Appendix B.1 Draft of Laboratory policy	123
Appendix B.2 Term of references of laboratory committee.....	124
Appendix C Standard guideline of equipment and activities recommended by laboratory committee to general laboratory (surgery and non surgery).....	126
Appendix D Questionnaire	130
Appendix E The Ministry of Health approved letter for data collection.	133
CURRICULUM VITAE.....	134

LIST OF TABLES

	Page
Table 1.1 The Ministry of Health expenditure per Capita.....	3
Table1.2 The annual Expenditure of Laboratory services and Ministry of Health Operation Cost.....	3
Table1.3: Cost of the reagent that cannot be used found in three national hospitals..	4
Table 3.1 The key informant and Type of study setting.....	49
Table 4.1a The percentage of reagent and materials from each sources in national Program.....	58
Table 4.1.bThe percentage of reagent and materials from each sources in national hospitals.....	59
Table 4.2 The reagent and cost that the hospital laboratories not used not used	60
Table 4.3 Comparison Ministry of Health purchasing price and the price in the free market.....	61
Table 4.4 The availability of basic equipment in province and district hospital Laboratories.....	63
Table 4.5 The numbers and capacity of staff in the national hospital laboratories....	71
Table 4.6 The Ministry of Health budget and expenditure 1995-1998.....	76

LIST OF FIGURES

Figure 1	Organization structure of laboratory services	11
Figure 2	Diagram of interrelationship of laboratory supplies	14
Figure 3	Coordination Committee of laboratory supplies	18
Figure 4	Conceptual framework of influence factors	23