

ความต้องการและปัญหาด้านสุขภาพ การเข้าถึงบริการ ภาวะความซึมเศร้า
และคุณภาพชีวิตของวัยรุ่น กับการสร้างภาคีความร่วมมือ



นางสาว รัตนา สำโรงทอง

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาสาธารณสุขศาสตรดุษฎีบัณฑิต

สาขาวิชาการพัฒนาระบบสาธารณสุข

วิทยาลัยการสาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย

ปีการศึกษา 2547

ISBN 974-9599-61-6

ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

**ADOLESCENT HEALTH NEEDS, ACCESSIBILITY OF
SERVICES, DEPRESSION AND QUALITY OF LIFE BY
ASSISTING IN THE DEVELOPMENT OF COMMUNITY
PARTNERSHIPS**

Ms. Ratana Somrongthong

**A Dissertation Submitted in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy in Public Health**

Health Systems Development Program

College of Public Health

Chulalongkorn University


Academic Year 2004

ISBN 974-9599-61-6


Copyright Chulalongkorn University


Dissertation Title : Addressing Adolescents' Health Needs, Accessibility of Services, Depression and Quality of Life by Assisting in the Development of Community Partnerships
By Ratana Somrongthong
Program : Doctoral of Philosophy in Public Health (Health Systems Development), College of Public Health
Dissertation Advisor : Professor Chitr Sitthi-amorn, M.D., PhD.
Dissertation Co- Advisor : Emeritus Professor Edgar J. Love, M.D., PhD.


Accept by the College of Public Health, Chulalongkorn University, Bangkok Thailand in Partial Fulfillment of requirements for the Doctoral Degree.

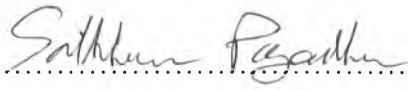

....., Dean of the College of Public Health
(Professor Chitr Sitthi-amorn, M.D., PhD.)

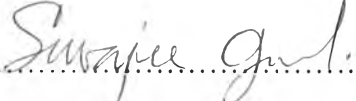
THESIS COMMITTEE


.....Chairperson
(Prof. Dr. Nikorn Dusitsin, M.D.,)


.....Thesis Advisor
(Professor Chitr Sitthi-amorn, M.D., PhD.)


.....Member
(Emeritus Professor Edgar J. Love, M.D., PhD.)


.....Member
(Associate Professor Dr. Sathirakorn Pongpanich)


.....Member
(Assistant Professor Dr. Suvajee Good)

PH: 991208 : MAJOR HEALTH SYTEMS DEVELOPMENT PROGRAM

KEYWORDS : ADDRESSING ADOLESCENT/ HEALTH NEEDS/ HEALTH PROBLEMS HEALTH SERVICES/ ACCESSIBILITY/ UTILIZATION/ DEPRESSION/ QUALITY OF LIFE/ COMMUNITY PARTNRSHIP/ SLUM

RATANA SOMRONGTHONG: ADOLESCENT HEALTH NEEDS, ACCESSIBILITY OF SERVICES, DEPRESSION AND QUALITY OF LIFE BY ASSISTING IN THE DEVELOPMENT OF COMMUNITY PARTNERSHIPS. DISSERTATION ADVISOR: PROFESSOR CHITR SITTHI-AMORN, M.D., M.Sc., Ph.D., DISSERTATION CO-ADVISOR: PROFESSOR EDGAR J.LOVE, M.D., Ph.D. 331 pp. ISBN 974-9599-61-6

Objectives: 1) to determine the nature and extent of existing governmental and non-governmental services for adolescents, including community organizations; 2) to determine health service needs and utilization of existing health services focusing on geographic accessibility, availability, affordability and acceptability of adolescents by gender and stage of adolescence; 3) to compare the health service needs and utilization of existing health services between males/females and stages of adolescence; 4) to measure the level of depression using the Center for Epidemiologic Studies Depression Scale (CES-D); 5) to define the meaning of Quality of Life(QoL) as perceived by adolescents; 6) to measure the quality of life of adolescents using the modified WHO-QoL instrument; and 7) to develop an intervention /evaluation program to improve access and use of health services, and the quality of life of adolescents, through community partnerships.

Methods: This study adopted an exploratory and descriptive design with both qualitative and quantitative methods. A questionnaire was administered to 871 randomly sampled adolescents aged 12-22 years. The data were analyzed using content analysis for qualitative data, and the chi-square test and logistic regression for quantitative data.


Results: The sample population was composed of more females than males (57.2 vs. 42.8%). The subjects' ages ranged from early adolescent (12-13 years; 23.3%), mid adolescent (14-17 years; 48.2%) and late adolescent (18-22 years; 28.5%) with a mean age of 15 years (S.D.=2.82). The majority (97.8%) were single and most (78.3%) were enrolled in school. In terms of physical health, only 5.9% reported chronic disease. In contrast, their mental health fared much worse, with one third of the subjects having depressive symptoms. Moreover, gender differences existed in depressive symptoms in all subjects, and early and mid-adolescents ($P = <.001, .027, .002$, respectively), and females were more likely than males to have depressive symptoms. About 19.0% of subjects reported experience of sexual activity. Most of the sex partners were their lovers, and of those, only 12.6% indicated constant condom use. Almost three-fourths (71.8%) of the subjects reported their QoL to be moderate, and no gender difference was found. The top ten adolescent health needs/problems (excluding gender issues) were: 1) acne; 2) unintended pregnancy; 3) amphetamine addiction; 4) heroin addiction; 5) induced abortion; 6) stress; 7) brawling (fighting); 8) smoking; 9) alcohol, and 10) rape. Gender differences were found for 8 of these 10 issues, where smoking seemed to be the only health need/problem expressed equally by both genders. Moreover, an age group difference was found for "smoking" ($P = .019$).

The qualitative study revealed that there were gaps, fragmentation, and redundancy in the existing health services. Most of the participants agreed to work together as a community partnership to improve adolescent health accessibility. The determinants of health service utilization/accessibility for all subjects were "*guardian's occupation*", and "*chance to meet a doctor at the health facilities*". In analyzing the differences in these determinants, between gender and age group, the following were found: (1) for gender difference, "*guardian's occupation*" was a more important determinant for males, whereas "*chance to meet a doctor at the health facilities*" was more important for females; and (2) for differences among age groups, early adolescents identified "*convenience of time for visiting health facilities*", "*current education*", "*knew about health facilities in the community*" as the most important determinants, whereas mid-adolescents said that "*knew about household expense*" was the most important determinant; for late adolescents, "*guardian's occupation*", "*knew about health facilities in the community*", and "*age*" were the most important determinants.

In terms of health service utilization, the percentage of subjects utilizing services for the top ten health problems was less than 60%, and males utilized health services less than females. Among males, health service utilization for being injured during a brawl, smoking, alcohol and stress, was less than 30%. Among females, health service utilization for stress and depression was less than 25%.

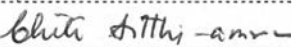
As an important component of this study, the stakeholders, based on the study results, collectively developed common objectives and a plan of action for their community intervention programs. The group indicated a need for improvement of services related to sexual and reproductive health, mental health and substance abuse among adolescents. In future research, social accessibility and related social issues should be reviewed. In moving forward, participatory action research is needed to create trust in partnership, and to pool and share manpower and physical resources. Subsequent research and interventions would maximize their benefits by selecting a prime mover as the project leader, who would be instrumental in mobilizing the stakeholders to work together toward a healthy community for adolescents.

Student's signature



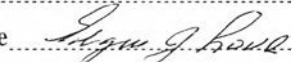
Field of study Health Systems Development

Advisor's signature



Academic year 2004

Co-advisor's signature



รัตนา สำโรงทอง : ความต้องการและปัญหาด้านสุขภาพ การเข้าถึงบริการ ภาวะความซึมเศร้า และคุณภาพชีวิตของวัยรุ่น กับการสร้างภาคีความร่วมมือ. (Adolescent Health Needs, Accessibility of Services, Depression and Quality of Life by Assisting in the Development of Community Partnerships). อาจารย์ที่ปรึกษา: ศาสตราจารย์นายแพทย์จิตร์ สิทธิอมร, อาจารย์ที่ปรึกษาร่วม: ศาสตราจารย์นายแพทย์ Edgar J.Love ; 331 หน้า ISBN 974-9599-61-6

การวิจัยนี้เป็นการศึกษาเชิงพรรณนา ใช้การศึกษาเชิงคุณภาพ โดยการสัมภาษณ์เจาะลึก, การสนทนากลุ่ม และการศึกษาเชิงปริมาณ มีวัตถุประสงค์เพื่อ

1. ศึกษาลักษณะของการให้บริการด้านสุขภาพวัยรุ่นของหน่วยงานต่างๆ ในชุมชน
2. ศึกษาถึงความต้องการและปัญหาด้านสุขภาพ การเข้าถึงบริการของวัยรุ่นชาย-หญิง และในแต่ละกลุ่มอายุ
3. เปรียบเทียบความต้องการบริการด้านสุขภาพกับการไปใช้บริการของวัยรุ่นชาย-หญิง และในแต่ละกลุ่มอายุ
4. ประเมินระดับภาวะความซึมเศร้าโดยใช้ แบบวัด CSE-D
5. ศึกษาถึงการให้ความหมาย "คุณภาพชีวิต" ของวัยรุ่น
6. ประเมินคุณภาพชีวิตโดยใช้ แบบวัด WHO-BREF
7. สร้างภาคีความร่วมมือเพื่อพัฒนาการให้บริการด้านสุขภาพที่วัยรุ่นสามารถเข้าถึง อันนำไปสู่การลดปัญหาทางสุขภาพ ความซึมเศร้า อันนำไปสู่การมีคุณภาพชีวิตที่ดี

การเก็บข้อมูลเชิงคุณภาพใช้แบบแนวสัมภาษณ์เจาะลึก และแนวสนทนากลุ่ม การเก็บข้อมูลเชิงปริมาณใช้แบบสอบถามกับกลุ่มตัวอย่างเป็นวัยรุ่นอายุ 12-22 ปี ที่อาศัยอยู่ในสลัมแห่งหนึ่งในกรุงเทพฯ การวิเคราะห์สถิติใช้ Chi-square และ Regression

ผลการศึกษา พบว่ากลุ่มตัวอย่างเป็นเพศหญิงมากกว่าชาย (57.2% , 42.8%) แบ่งเป็นวัยรุ่นตอนต้น (อายุ 12-13 ปี 23.3%) วัยรุ่นตอนกลาง (14-17 ปี 48.2%) และวัยรุ่นตอนปลาย (18-22 ปี 28.5%) ส่วนใหญ่ (78.3%) อยู่ในสถานศึกษา มีเพียง 5.9% เจ็บป่วยเรื้อรัง หนึ่งในสามของกลุ่มตัวอย่างมีภาวะความซึมเศร้า โดยพบความแตกต่างอย่างมีนัยสำคัญทางสถิติในระหว่างเพศ ($P < .001$) และในระหว่างเพศในกลุ่มวัยรุ่นตอนต้น และวัยรุ่นตอนปลาย ($P = .027$, $.002$) หญิงมีภาวะความซึมเศร้ามากกว่าชาย วัยรุ่นเกือบ 1 ใน 5 คน เคยมีประสบการณ์ทางเพศ และส่วนใหญ่มีเพศสัมพันธ์กับคูรัก โดยมีเพียงร้อยละ 12.6 ใช้ถุงยางอนามัยทุกครั้ง วัยรุ่นให้ความหมายเรื่อง "คุณภาพชีวิต" ใกล้เคียงกับคำจำกัดความขององค์การอนามัยโลก หากแต่วัยรุ่นไม่ได้กล่าวถึงเรื่องเพศและการเข้าถึงบริการ วัยรุ่นส่วนใหญ่ (71.8%) มีคุณภาพชีวิตในระดับกลาง สิบอันดับแรกของปัญหาสุขภาพวัยรุ่น ได้แก่ 1) ลิว 2) ตั้งครรภ์ไม่พึงประสงค์ 3) ยาบ้า 4) เฮอร์oin 5) ทำแท้ง 6) เครียด 7) ต้อสู้/ซกตี 8) บุหรี่ 9) สุรา และ 10) ช่มชู้ ซึ่งพบความแตกต่างอย่างมีนัยสำคัญทางสถิติในระหว่างเพศ กับปัญหาสุขภาพที่กล่าวมาแล้ว 8 จาก 10 เรื่อง (ยกเว้นเรื่องบุหรี่ปริมาณแอลกอฮอล์) และพบความแตกต่างอย่างมีนัยสำคัญทางสถิติในระหว่างกลุ่มอายุกับปัญหาสูบบุหรี่

การศึกษาเชิงคุณภาพพบว่ายังมีช่องว่าง การแบ่งแยก และความซ้ำซ้อนของการบริการด้านสุขภาพ ปัจจัยการเข้าถึงบริการด้านสุขภาพของวัยรุ่น ได้แก่ "อาชีพของผู้ปกครอง" และ "โอกาสได้พบแพทย์ที่สถานบริการสุขภาพ" การวิเคราะห์ความแตกต่างในระหว่างเพศและกลุ่มอายุของวัยรุ่น สำหรับปัจจัยเหล่านี้ พบว่า (1) ความแตกต่างในระหว่างเพศ อาชีพของผู้ปกครองมีความสำคัญสำหรับเพศชาย ในขณะที่โอกาสการได้พบแพทย์ที่สถานบริการสุขภาพกลับมีความสำคัญสำหรับเพศหญิง (2) ความแตกต่างในระหว่างกลุ่มอายุ พบว่าปัจจัยที่มีความสำคัญที่สุดถึงการเข้าถึงบริการในวัยรุ่นตอนต้น ได้แก่ "ช่วงเวลาที่สะดวกในการไปสถานบริการสุขภาพ" "ระดับการศึกษาในปัจจุบัน" และ "การรู้จักสถานบริการสุขภาพในชุมชน" สำหรับวัยรุ่นตอนกลาง ได้แก่ "รู้เกี่ยวกับค่าใช้จ่ายในบ้าน" และสำหรับวัยรุ่นตอนปลาย ได้แก่ "อาชีพของผู้ปกครอง" "รู้จักสถานบริการสุขภาพในชุมชน" และ "อายุ"

การไปใช้บริการด้านสุขภาพ พบว่าในสิบอันดับแรกของปัญหาวัยรุ่นนั้น กลุ่มวัยรุ่นไปใช้บริการน้อยกว่าร้อยละ 60 เพศชายไปใช้บริการน้อยกว่าเพศหญิง โดยเพศชายไปใช้บริการเนื่องจากบาดเจ็บจากการชกตี/ต้อสู้ การสูบบุหรี่ การดื่มแอลกอฮอล์ และความเครียด สำหรับเพศหญิงไปใช้บริการเนื่องจากความเครียดและภาวะความซึมเศร้า

จากการศึกษาพบว่า ผู้ที่ทำงานเรื่องวัยรุ่นในชุมชนตกลงที่จะร่วมกันเป็นภาคีเพื่อทำให้วัยรุ่นเข้าถึงบริการสุขภาพ และพัฒนาคุณภาพชีวิตวัยรุ่น โดยร่วมกันวางวัตถุประสงค์หลัก และนำผลการศึกษางานวิจัยครั้งนี้จะเป็นข้อมูลสำคัญ ในการวางแผนการดำเนินสำหรับจัดทำกิจกรรม/โครงการในชุมชน ในการพัฒนาการเข้าถึงสุขภาพของวัยรุ่น โดยเน้นด้านระบบสืบพันธุ์/เพศสัมพันธ์ สุขภาพจิต และสารเสพติด สำหรับการวิจัยในอนาคตนั้นควรพิจารณาในเรื่องของการเข้าถึงบริการด้านสังคมและปัจจัยทางด้านสังคมอื่นๆ ภาคีความร่วมมือและการวิจัยเชิงปฏิบัติการจะนำมาสู่ความร่วมมือและใช้ทรัพยากรร่วมกัน โดยควรมีการเลือกผู้นำเพื่อเป็นกลไกที่สำคัญในการทำงานร่วมกัน

สาขาวิชา การพัฒนาระบบสาธารณสุข

ปีการศึกษา 2547

ลายมือชื่อนิสิต

ลายมือชื่ออาจารย์ที่ปรึกษา

ลายมือชื่ออาจารย์ที่ปรึกษาร่วม

.....

.....

.....

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to a number of individuals who have made invaluable contributions in their specialized fields towards this study. It would not have been possible without the involvement of the following people:

First, my advisor, Prof. Chitr Sitthi-amorn, who provided me the great opportunity to do this research. I owe him my deepest gratitude and appreciation for his overall supervision. His guidance and understanding have helped me tremendously throughout my study.

Most importantly, I am grateful to Prof. Edgar J. Love, my co- advisor, who thought out my entire period of the study, and provided me with valuable knowledge, guidance, and encouragement

To Prof. Dr. Nikorn Duditsin, Asssoc. Prof. Dr. Sathirakorn Pongpanich, Assist. Prof. Dr. Suvajee Good, Dr. Robert Chapman, and Assist. Prof. Dr. Nantavarn Vichit-Vadakan for their accurate comment and necessary revision in my study.

Special appreciations are extended to Mrs. Orapin Laosee, Ms. Patcharin Chansawang, Ms. Nuanong Wongkamthong, Ms. Preeraya Ung-udornpakdee Mrs. Dares Chusri, Miss Sunanta Wongchalee and staff of the College of Public Health, Chulalongkorn University for their support and encouragement. My sincere gratefulness goes to Mr. and Mrs. Adams for English editing, reading, correcting and revising this thesis manuscript.

Most of all, to my family for having been so encouraging and giving unending moral support, for their love and care, forbearance and understanding throughout this study which consumed much time which would otherwise have been spent with them.

LIST OF CONTENTS

Abstract	Page iii
Acknowledgements	vi
List of Contents	vii
List of Tables	xiii
List of Figures	xix
Abbreviation	xx

CHAPTER I: BACKGROUND AND SIGNIFICANCE

1.1 Introduction.....	1
1.2 Growth of adolescent population.....	1
1.3 Adolescent and urban growth.....	2
1.4 Adolescent health needs and accessibility of health care services.....	3
1.5 Quality of life of adolescents.....	5
1.6 National policy to cope with adolescents' problems.....	6
1.7 Programme result from policy: The mismatch.....	7
1.8 Possible entry points for intervention.....	8
1.9 Purpose of intervention.....	10
1.10 Study approach.....	10
1.11 Implication of the research results.....	10

CHAPTER II: LITERATURE REVIEW

2.1 Definition of the term "adolescence".....	12
2.1.1 Gender and physiological & psychological changes.....	12
2.1.1.1 Male adolescent.....	13
2.1.1.2 Female adolescent.....	13
2.1.2 Classification of adolescents.....	14
2.1.2.1 Adolescent with health problems.....	15
2.1.2.2 At-risk adolescents.....	15
2.1.2.3 Normal group.....	16
2.2 What is the adolescent health situation?.....	16
2.2.1 Adolescent morbidity & mortality.....	17
2.2.2 Adolescents' health needs & health problems.....	18
2.2.2.1 Global situation.....	18
2.2.2.2 Regional situation.....	20
2.2.2.3 Thailand situation.....	21
2.3 Existing adolescent health programmes/services.....	23
2.3.1 Global adolescent health program/services.....	23
2.3.2 Existing adolescent health program/services in Thailand.....	24
2.3.2.1 Adolescent health centers.....	24
2.3.2.2 School programmes.....	24
2.3.2.3 Community programmes.....	25

2.4	Adolescents' health needs, accessibility of health and services provisions in Thailand.....	26
2.4.1	Sexuality and reproductive health.....	26
2.4.1.1	Unintended pregnancy.....	28
2.4.1.2	Sexually transmitted diseases.....	28
2.4.1.3	HIV/AIDS.....	28
2.4.2	Substance abuse.....	29
2.4.2.1	Tobacco.....	29
2.4.2.2	Illicit drugs.....	30
2.4.3	Injury and violence.....	30
2.4.4	Mental health/suicide.....	31
2.5	Accessibility: definition.....	33
2.6	Problems of accessibility and Utilization of health services for adolescents.....	35
2.7	Depression.....	38
2.7.1	Adolescent depression.....	38
2.7.2	Why is the center for Epidemiology studies depression scale (CES-D) suitable for measuring adolescents' depression ?.....	39
2.7.3	Thai adolescents and depression.....	40
2.8	Adolescents' Quality of Life.....	40
2.8.1	Definition of the term of "quality of life".....	40
2.9	QoL instruments.....	41
2.9.1	Generic instruments.....	42
2.9.2	Disease-specific instruments.....	42
2.9.3	Other instruments related to QoL.....	42
2.9.4	Adolescents' Quality of Life.....	43
2.10	Adolescents' quality of life instruments.....	44
2.10.1	University of Toronto.....	44
2.10.2	University of Washington.....	46
2.10.3	Others.....	46
2.11	World Health Organization Quality of Life (WHO QoL).....	47
2.12	Why the WHO QoL BREF is Suitable for Measuring Adolescents' QoL.....	51
2.13	Slum Community.....	53
2.13.1	Problems in slum communities.....	53
2.13.2	Klong Toey Slum: History and its Situation.....	54
2.13.3	What are the major health problems of adolescents in slum community?.....	55
2.13.4	What is the quality of life (QoL) of slum adolescents?.....	58
2.13.5	Existing adolescent health and development programs/services in Klong Toey Slum Community.....	58
2.14	What Problems are there Related to the Existing Adolescent Health Services/Programs in Klong Toey Slum Community?.....	62
2.15	How to Solve the Problems?.....	65

2.16	Community Partnerships: an Approach for Improving Adolescents Health, the Accessibility of Health services, and QoL.....	66
2.16.1	Introduction.....	66
2.16.2	Community partnerships: its definition.....	68
2.16.3	Create partnerships.....	69
2.16.4	Community partnerships for healthy adolescent.....	71
CHAPTER III: OBJECTIVES, RESEARCH QUESTIONS, DEFINITIONS, AND CONCEPTUAL FRAMEWORK		
3.1	Objectives of the Study.....	73
3.1.1	General Objectives.....	73
3.1.2	Specific Objectives.....	73
3.2	Research Questions.....	74
3.3	Operational Definitions.....	75
3.4	Conceptual Framework.....	79
CHAPTER IV: METHODOLOGY		
4.1	Research Design.....	81
4.2	Study Community and Study Population	81
4.2.1	Study community.....	81
4.2.2	Study population.....	82
4.3	Key Informants.....	82
4.4	Sample Size.....	84
4.4.1	Eligibility criteria.....	85
4.4.2	Sampling technique.....	86
4.5	Data Collection Procedure.....	87
4.5.1	Qualitative data collection.....	88
4.5.2	Quantitative data collection.....	90
4.5.3	Validity and Reliability.....	91
4.6	Measurements.....	93
4.6.1	Qualitative measures.....	94
4.6.2	Quantitative measures.....	94
4.7	Data Analysis.....	94
4.8	Ethical Considerations.....	95
4.9	Limitation.....	96
CHAPTER V: RESULTS		
5.1	Nature and Extent: Issues Related to Needs, Services, Accessibility.....	97
5.1.1	Qualitative study	97
5.1.1.1	Focus group discussions (FGD).....	98
5.1.1.2	In-depth interview.....	115
5.1.2	Quantitative study.....	128
5.1.2.1	General characteristics	129

5.1.2.1.1	Gender and stage of adolescence (age)	129
5.1.2.1.2	Marital status	129
5.1.2.1.3	Current education status	130
5.1.2.1.4	Education achievement	130
5.1.2.1.5	Working status	130
5.1.2.1.6	Income	130
5.1.2.1.7	Home town	130
5.1.2.2	Family	132
5.1.2.2.1	Position in the family	132
5.1.2.2.2	Number of people in the household	132
5.1.2.2.3	Parent's marital status	132
5.1.2.2.4	Guardian	132
5.1.2.2.5	Guardian's occupation	132
5.1.2.2.6	Household income	133
5.1.2.2.7	Household expenses	133
5.1.2.2.8	Family relationships	135
5.1.2.3	Peers	136
5.1.2.3.1	Having closed boy/girl friend	137
5.1.2.3.2	Peer relationships	137
5.1.2.3.3	Family relationships vs peer relationships	139
5.2	Accessibility and their Determinants	140
5.2.1	Introduction: Health cards and adolescents	140
5.2.2	Accessibility	142
5.2.2.1	Geographic accessibility	143
5.2.2.2	Affordability	145
5.2.2.3	Availability	147
5.2.2.4	Acceptability	150
5.2.2.5	Conclusion	151
5.2.3	Determinants: Univariate analysis	152
5.2.4	Determinants: Multivariate analysis	154
5.2.4.1	Binary logistic regression	155
5.3	Needs and Utilization	164
5.3.1	Introduction	164
5.3.1.1	Top ten adolescent's health needs and problems	164
5.3.1.2	Having chronic diseases	166
5.3.1.3	Having sickness within last 2 months	167
5.3.1.4	Health consultant (for overall health problems)	168
5.3.1.5	Top ten Health needs/problems (excluding gender issues), place that they could visit when they faced with health problems and health consultant	168
5.3.1.6	Top ten health needs and utilization of health services	171
5.3.1.7	Health needs/problems (excluding sexual and reproductive health) by gender and stage of adolescents	173

5.3.2 Needs and utilization related to sexuality and reproductive health	179
5.3.2.1 Opinion toward sex education	179
5.3.2.2 Sexual activity	179
5.4 Depression	188
5.4.1 Overall depression	189
5.4.2 By items included in Questionnaires	190
5.4.3 Relationships between depression and overall QoL	196
5.4.4 Conclusions	197
5.5 Quality of Life (QoL)	197
5.5.1 The perception of adolescents towards QoL	197
5.5.2 Adolescents' QoL as measure by WHOQoL-BREF	201
5.5.2.1 Overall assessment and general health facet	203
5.5.2.2 QoL's domains	205
5.5.2.3 Summation of adolescents' QoL	210
5.5.2.4 Conclusion	210
5.6 Advice from Stakeholders for Reducing Gaps, Fragmentation and Redundancy of Services	211
5.7 Partnership: Feasibility to Process for Reducing gaps, Redundancy, Fragmentation of Services, Improving QoL and Alleviation of Depression	215
5.8 Implication of Qualitative Data and Quantitative Data for Development of an Intervention Program	220
5.8.1 Implication of Qualitative data as an in put for planning	220
5.8.2 Implication of Quantitative data as an in put for planning	221
 CHAPTER VI: DISCUSSION	
6.1 Introduction	225
6.2 Discussion of Finding	225
6.2.1 Sample Features	225
6.2.2 What is the nature and extent of existing health services for adolescents?	226
6.2.3 What are the determinants of accessibility of health services in terms of geographic accessibility, availability, affordability and acceptability of adolescent health services between male and female adolescents and in the age sub-groups of adolescence?	229
6.2.4 What are the differences in terms of service needs and utilization of health services, between male and female adolescents, and in each sub-group of adolescence?	235
6.2.5 What are the perception of adolescents towards QoL?	238
6.2.6 What is the level of quality of life of adolescents, as measured by the WHO-QoL-Bref ?	239

6.2.7 What is the level of depression among adolescents as measured by the Center for Epidemiologic Studies' Depression Scale (CES-D)?.....	240
6.2.8 What strategy combines quantitative & qualitative information to develop an intervention program to improve accessibility, utilization, to alleviate depression, and to improve the QoL of adolescents?.....	241
6.2.9 What are the stakeholder perceptions of the processes and content of partnerships for developing the intervention program?.....	243
6.2.10 Scope and limitations of the study	244
6.2.11 Conclusions.....	245
6.2.12 Recommendations.....	249
References	254
Appendices	270
Appendix A Community Map.....	271
Appendix B Adolescent Questionnaire.....	272
Appendix C General Characteristic's Table.....	293
Appendix D Depression's Table.....	303
Appendix E Quality of Life's Table.....	313
Curriculum Vitae	329

LIST OF TABLES

	Page
Table 2.1 Classification of health problems and health-related behaviors of young people in developing countries.....	19
Table 2.2 Population profiles: age 10-24 years in WHO/SEARO countries.....	21
Table 2.3 WHO QoL-Bref domains.....	52
Table 4.1 Variables, Measurement Scale and Statistic Inference.....	93
Table 4.2 Frame of the Study.....	95
Table 5.1 Focus groups participants distribution by current education status and by Gender.....	102
Table 5.2 Summary of the findings of the Focus group discussion: <i>Male adolescents</i>	113
Table 5.3 Summary of the findings of the Focus group discussion: <i>Female adolescents</i>	114
Table 5.4 Description of demographic characteristic of adolescents.....	131
Table 5.5 Quantitative data of study samples and family.....	134
Table 5.6 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (Age), by Gender and the Level of Family Relationships.....	136
Table 5.7 Having close boy/girl friend by gender.....	137
Table 5.8 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by the Level of Peer Relationships.....	139
Table 5.9 Descriptive Analysis of Adolescents: Distribution by the Level of Peer Relationships and Family Relationships.....	139
Table 5.10 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by Having health card.....	140
Table 5.11 Descriptive Analysis of Adolescents: Distribution by Current Educational Education and by Having Health Card.....	141
Table 5.12 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by 30 Baht health card vs other cards.....	141
Table 5.13 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by Health card utilization.....	142
Table 5.14 Descriptive Analysis of Adolescents: Distribution by Category of reasons/diseases for health card utilization and by Gender.....	142
Table 5.15 The existing health services in the community.....	143
Table 5.16 Descriptive Analysis of Adolescents: Distribution by Gender, by Stage of Adolescence and by Place for visit when they had faced with health problems (answer more than one).....	144

Table 5.17	Descriptive Analysis of Adolescents: Distribution by Gender, by Stage of Adolescence and by Travel time from/home to health facilities.....	144
Table 5.18	The latest visit health facilities within 2 months by gender and stage of adolescents.....	145
Table 5.19	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by the opinion on total cost for health care service.....	145
Table 5.20	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by the feeling that health provider always prescribes expensive drugs.....	146
Table 5.21	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by the Person who paid for health care cost.....	147
Table 5.22	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by The opinion on time convenience for utilizing health services.....	148
Table 5.23	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by The opinion on the waiting time.....	148
Table 5.24	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by The opinion on time to meet the doctor.....	149
Table 5.25	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by the opinion about doctor/health staff always prescribe unavailable drugs at the health facility.....	150
Table 5.26	Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by the Level of Satisfaction towards health services.....	151
Table 5.27	The difference between potential factors that related to accessibility by gender and by stage of adolescence.....	153
Table 5.28	Association between socio-economic factors and other factors that related to accessibility and health services accessibility of <u>both genders</u>	156
Table 5.29	Association between socio-economic factors and other factors that related to accessibility and health services accessibility in <u>males</u>	157
Table 5.30	Association between socio-economic factors and other factors that related to accessibility and health services accessibility in <u>females</u>	158
Table 5.31	Association between socio-economic factors and other factors that related to accessibility and health services accessibility in <u>early adolescents</u>	159

Table 5.32 Association between socio-economic factors and other factors that related to accessibility and health services accessibility <u>mid adolescent</u>	160
Table 5.33 Association between socio-economic factors and other factors that related to accessibility and health services accessibility in <u>late adolescents</u>	161
Table 5.34 Summary of the association between factors related to accessibility and health services accessibility by both genders, by each gender and by stage of adolescence (age).....	163
Table 5.35 Descriptive Analysis of Adolescents: Distribution by Gender and by Top ten adolescents' health needs and problems including gender issues	165
Table 5.36 Chronic diseases in adolescent	166
Table 5.37 Descriptive Analysis of Adolescents: Distribution by Current Education Status and by Having Chronic Disease	166
Table 5.38 The sickness of adolescents within last 2 months	167
Table 5.39 Descriptive Analysis of Adolescents: Distribution by Current Education Status and by Having Sickness within last two months.....	168
Table 5.40 Adolescent and health consultant	168
Table 5.41 Difference of top ten adolescents' health needs/problems (<i>both real needs and felt needs</i>) excluding gender issue by gender and by stage of adolescences	169
Table 5.42 The odds ratio of adolescents indicated that they had and not having health needs/problems among top 10 ten health needs/problems excluding gender issues by gender.....	171
Table 5.43 Top ten health needs and utilization of health services of both genders	172
Table 5.44 Top ten health needs and utilization of health services in male adolescents.....	172
Table 5.45 Top ten health needs and utilization of health services in female adolescents	173
Table 5.46 Descriptive Analysis of Male Adolescents: Distribution by Stage of adolescence and by top five health problems (exclude sexual and reproductive health).....	174
Table 5.47 Table Descriptive Analysis of Female Adolescents: Distribution by Stage of Adolescence and by top five health problems (exclude sexual and reproductive health).....	174
Table 5.48 Health needs, health problems of <u>Early Male Adolescents</u> and place that they could visit when they face with problems	175
Table 5.49 Health needs, health problems of <u>Mid Male Adolescents</u> and place that they could visit when they face with problems	175

Table 5.50 Health needs, health problems of <u>Late Male Adolescents</u> and place that they could visit when they face with problems	175
Table 5.51 Health needs, health problems of <u>Early Female Adolescents</u> and place that they could visit when they face with problems	176
Table 5.52 Health needs, health problems of <u>Mid Female Adolescents</u> and place that they could visit when they face with problems	176
Table 5.53 Health needs, health problems of <u>Late Female Adolescents</u> and place that they could visit when they face with problems	176
Table 5.54 Health needs, health problems of <u>Early Male Adolescents</u> and health consultant	177
Table 5.55 Health needs, health problems of <u>Mid Male Adolescents</u> and health consultant	177
Table 5.56 Health needs, health problems of <u>Late Male Adolescents</u> and health consultant	177
Table 5.57 Health needs, health problems of <u>Early Female Adolescents</u> and health consultant	178
Table 5.58 Health needs, health problems of <u>Mid Female Adolescents</u> and health consultant	178
Table 5.59 Health needs, health problems of <u>Late Female Adolescents</u> and health consultant	178
Table 5.60 Opinion towards sex education by gender	179
Table 5.61 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age), by Gender and by Sex Activities	179
Table 5.62 Sex debut by gender	180
Table 5.63 Sex partner and condom used by gender	181
Table 5.64 The familiarity with term of the following diseases as STD by Gender	182
Table 5.65 Sexual and reproductive health problems of <u>early male adolescents</u> and place that they could visit when they face with problems	183
Table 5.66 Sexual and reproductive health problems of <u>Mid Male Adolescents</u> and place that they could visit when they face with problems	183
Table 5.67 Sexual and reproductive health problems of <u>Late Male Adolescents</u> and place that they could visit when they face with problems	184
Table 5.68 Sexual and reproductive health problems of <u>Early Female Adolescents</u> and place that they could visit when they face with problems	184
Table 5.69 Sexual and reproductive health problems of <u>Mid Female Adolescents</u> and place that they could visit when they face with problems	185

Table 5.70 Sexual and reproductive health problems of <u>Late Female Adolescents</u> and place that they could visit when they face with problems	185
Table 5.71 Sexual and reproductive health problems of <u>Early Male Adolescents</u> and health consultant.....	186
Table 5.72 Sexual and reproductive health problems of <u>Mid Male Adolescents</u> and health consultant.....	186
Table 5.73 Sexual and reproductive health problems of <u>Late Male Adolescents</u> and health consultant.....	187
Table 5.74 Sexual and reproductive health problems of <u>Early Female Adolescents</u> and health consultant.....	187
Table 5.75 Sexual and reproductive health problems of <u>Mid Female Adolescents</u> and health consultant.....	188
Table 5.76 Sexual and reproductive health problems of <u>Late Female Adolescents</u> and health consultant.....	188
Table 5.77 Simplify Symptoms of Depression (based on the cutoff point 22 scores) by Gender and Stage of Adolescence.....	189
Table 5.78 Level of Depression (base on the study in USA) by Gender and by Stage of Adolescence (<i>Ref: RushtonL. Jerry 2002, Robert et al., 1991</i>).....	190
Table 5.79 Descriptive Analysis of Adolescents: Distribution by Symptoms of Depression, by Overall QoL and by Gender.....	197
Table 5.80 The comparison of the perceived of adolescents' QoL and the QoL definition by WHO.....	201
Table 5.81 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by Rating of quality of life.....	203
Table 5.82 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by Satisfaction with their health status.....	204
Table 5.83 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by Overall assessment and general health facet.....	205
Table 5.84 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by Level of QoL of Physiological Domain (2 scale ranges).....	206
Table 5.85 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by Level of QoL of Psychological Domain (2 scale ranges).....	207
Table 5.86 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by Level of QoL of Social Domain.....	208
Table 5.87 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by the Environmental Domain of QoL.....	209

Table 5.88 The level of QoL of each domain (Physiological, Psychological, Social Domain and Environmental) by Gender	209
Table 5.89 Descriptive Analysis of Adolescents: Distribution by Stage of Adolescence (age) by Gender and by the summation of adolescents' QoL.....	210

LIST OF FIGURES

	Page
Figure 2.1 Thai Adolescent mortality rate by age and cause of death	18
Figure 2.2 Health services and the needs of adolescents in Thailand	64
Figure 2.3 The Ladder of participation	70
Figure 2.4 Approach	72
Figure 3.1 Conceptual framework	80
Figure 4.1 Data collection procedure	91
Figure 5.1 Social Interaction Map of Stakeholders	98
Figure 5.2 The plan of action and evaluation shown	224

ABBREVIATION

AIDS	Acquired Immune Deficiency Syndrome
BMA	Bangkok Metropolitan Administration
CES-D	Center of Epidemiologic Studies Depression Scales
DHO	District Health Office
DPF	Duang Prateep Fondation
Dr.	Doctor
FGD	Focus Group Discussion
GO	Government Organization
HIV	Human Immune Virus
NGO	Non Government Organization
OPD	Out Patient Department
QoL	Quality of Life
STD	Sexual Transmitted Diseases
WHO	World Health Organization
WHO/QoL	World Health Organization' s Quality of Life
WHOQoL-BREF	World Health Organization' s Quality of Life (short form)
YQOL-S	Youth Quality of Life Instrument for Surveillance