RISKY SEXUAL BEHAVIOR AMONG THAI ADOLESCENT IN BANGKOK CONGESTED AREAS

PASQUALE FINALDI

A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENTOF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2014

Thematic Paper
entitled

RISKY SEXUAL BEHAVIOR AMONG THAI ADOLESCENT IN BANGKOK CONGESTED AREAS

.....
Mr. Pasquale Finaldi
Candidate

.....
Assoc. Prof. Arpaporn Powwattana,
Ph.D. (Nursing)
Major advisor

.....
Assoc. Prof. Oranut Pacheun,
Dr. P.H.
Co-advisor

.....
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

.....
Assoc. Prof. Oranut Pacheun,
Dr.P.H.
Program Director
Master of Public Health
Faculty of Public Health
Mahidol University

Thematic Paper
entitled

RISKY SEXUAL BEHAVIOR AMONG THAI ADOLESCENT IN BANGKOK CONGESTED AREAS

was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Public Health
on
March 21, 2014

Pasquale Finaldi
.....
Mr. Pasquale Finaldi
Candidate

Noraluk Ua-kit
.....
Assist. Prof. Noraluk Ua-Kit,
Ph. D.
Chair

.....
Assoc. Prof. Arpaporn Powwattana,
Ph.D. (Nursing)
Member

O. Pacheun
.....
Assoc. Prof. Oranut Pacheun,
Dr. P.H.
Member

B. Maha
.....
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

.....
Assoc. Prof. Phitaya Charupoonphol,
M.D., Dip. Thai Board of Epidemiology
Dean
Faculty of Public Health
Mahidol University

ACKNOWLEDGEMENTS

The success of this thesis can be succeeded by the attentive support from my major advisor Dr. Arpaporn Powattana. I would like to express to her the deepest appreciation for the continuous support, ideas, suggestion she provided since I started working on this thematic paper. I'm also very grateful to my co-advisor and Program Director Dr. Oranut Pacheun for the support since the first day I started this Master. I have to be extremely thankful to Associate Professor Chaweewon Boonshuyar for the support in the initial phase of the data analysis.

Special thanks to Ms. Pimrat Thammaraksa, Nursing Instructor at Boromarajonani College of Nursing and to Maj. Napaphen Jantacumma, Public Health Nursing Mahidol University Dr. P.H. student for the valuable support in the data collection and, especially, in the focus group discussions.

I would like to express my sincere gratitude to the staff of the MPH program.

I am very keen to thank all my classmates, as they all have been such a great source of inspiration.

I would like to express great appreciation to the participants who was the sampling in this study for the time they dedicated to answer the questionnaires and join the focus groups discussion. Without their participation this study would have not been possible.

Pasquale Finaldi

RISKY SEXUAL BEHAVIOR AMONG THAI ADOLESCENT IN BANGKOK CONGESTED AREAS

PASQUALE FINALDI 5637158 PHMP/M

M.P.H.

THEMATIC PAPER ADVISORY COMMITTEE: ARPAPORN POWWATTANA Ph.D., ORANUT PACHEUN Dr. P.H.

ABSTRACT

Risky sexual behavior among adolescent is a transversal phenomenon that affect both Low and Medium Income and High Income Countries. The problem has been analyzed using the Bronfenbrenner ecological model. The population consisted of late adolescents (15 – 19), using both survey and focus group discussions. This descriptive study was carried out in four congested areas of Bangkok (Railway community, Tuk Daeng, Rim Klong Sam Saeng and Soi Sauan Noeng), with a self-administered questionnaire distributed to 99 late adolescents (both male and female), and afterward three focus groups (one in Railway community with female; and two, in Rim Klong Sam Saeng, with female and male separately) were carried out. Independent variables, included micro (age, sex, attending school, having a job, having a source of income, alcohol consumption), meso (living with both parents, parental monitoring, parental communication, partner communication, peers' influence) and macro-level (urban environment and instant messaging). Descriptive statistics, Chi-square, and logistic regression were used to analyze quantitative data. The focus group was analyzed through theme extraction.

The quantitative analysis showed significant relations regarding age (p-value 0.001), attending school (p-value <0.001), having a job (p-value 0.024) at the micro-level; parental monitoring (p-value 0.023), and living with both parents (p-value 0.045) at meso-level, and instant messaging (p-value 0.001) at macro-level in the univariate (chi square) analysis and age (p-value 0.047) and instant messaging (p-value 0.030) for the bivariate (logistic regression) analysis. Focus group discussion highlighted the lack of parental monitoring and communication, alcohol use, peers' influence and instant messaging as relevant factors that lead to a higher risk of sexual behavior.

KEY WORDS: SEXUAL BEHAVIOR / ADOLESCENT / REPRODUCTIVE HEALTH / CONGESTED AREAS / BANGKOK

87 pages

CONTENTS

CONTENTS (cont.)

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
CDC	Centers for Disease Control and Prevention
FGD	Focus Group Discussion
HIV	Human Immunodeficiency Virus
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

CHAPTER I
INTRODUCTION

1.1 Rationale and justification

Risky sexual behavior among adolescent is a transversal phenomenon that affect both developed and developing countries. WHO defines adolescent as people whose age in between 10 and 19 years old. The category is then divided into early adolescents (10-14 years old) and late adolescents (15-19 years old). WHO had published in 2011(1) “Guidelines on Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries”, highlighting the importance and the seriousness of the related negative outcomes, like STIs, HIV, pregnancy. In the USA, is estimated that about 3 million adolescent get an STI every year and both Healthy people 2010 and Health people 2020 have put adolescent reproductive health in their agenda. In Thailand adolescent childbirth is above 10%, the level recommended by WHO, as it was 13.02, 13.37 and 12.01 in 2007, 2008 and 2009 (2).

Regarding Thailand, risky sexual behavior is being acknowledged more and more as one of the rising and most urgent to address public health problem. Siriarunrat et al highlight that the age at which the first sexual intercourse take place has gone down to 11 years old (the authors report that “the average age of first intercourse has decreased to the very young age of 11 years old, with a median of 14.5 years old in 7th – 12th graders in Bangkok”) and that is it often unplanned and not protected (3). Thato and Penrose point out that Thai adolescent are becoming sexually active at an earlier and earlier age (on average 12.8 and 13.0 years for boys and girls respectively in 2010). As sexual activity takes place mainly with stable sexual partners condom use is quite low, as this preventive measure has been historically associated with occasional sexual partners like commercial sex workers. In the same article is mentioned that the reported use of condoms among Thai adolescents is 53%. There are some emerging trend among Thai adolescents related to sexual activity that lead to

risky sexual behavior like the so called “La Taem” that means “accumulating sexual partners”, and sexual partner exchange or “swinging” (4).

Another trend related to risky sexual behavior in Thailand is that adolescent pregnancy is also growing. As reported by Chaikoolvatana et al., the figure has gone up from 13.9 in 2004 to 16.5 per 100 live births in 2011 (5). According to WHO (1) every year around 16 million of late adolescent give birth every year and that most of them are unwanted or unplanned and happened in developing or low-middle income countries. The negative consequences are both for the mother and the child.

The effect of adolescent pregnancy on maternal mortality and to perinatal and infant mortality has been widely acknowledged. Furthermore this issue puts involved people into the “vicious circle of ill-health and poverty” (1). The probability to die during pregnancy of while giving birth is double for late adolescent and quintuple for early adolescent compared to the one of women above 20 years. WHO estimates that between 2.0 and 4.4 million adolescents in low and middle income countries experience unsafe abortions every year. In addition, there is a higher probability for adolescent mothers to deliver low birth weight babies. Last but not least, there is a higher infant and child mortality among children born from mothers whose age is below 20 years old.

This issue is quite complex and is made by several aspects and the term risk and sex behavior are not univocal. Having said that, an analysis and understanding of the several factors and the relations among them is needed. As highlighted by some studies: “The primary challenge confronting practitioners is identifying and understanding the antecedents to these sexual risk behaviors” (6) and “to develop prevention and intervention strategies that are culturally specific to Thai adolescents, this phenomenon (risky sexual behaviors) must be carefully and sensitively explored” (7) . Several studies have highlighted many factors (both risk and protective) related to adolescent sexual behavior. In this study, the analysis had focused on some of the “cross-cutting” factors identified by Mmari and Sabherwal (8). At individual level, age (the older the adolescent the higher the risk), drinking alcohol are risk factors and level of education is a protective factor At partner level, discussing about reproductive health with the partner is a preventive factor. At peer level the risk factor that has been

considered is the presence of peers or friends who had had sex. At family level being orphan (or having only one of the parents) and living in an urban area are the risk factor considered.

Due to the complexity of the phenomenon contribution from several disciplines can shed a light and provide meaningful way of analysis. The problem has been analyzed having as reference the ecological model that has been elaborated into different versions. In this work the ecological model developed by Bronfenbrenner (9) has been used as reference. According to it, the behavior is the outcome of a complex and multiple level of influence: proximal and distal variables. Proximal variables are variable that are close to individual and can be classified into five levels: micro, meso, exo, macro and chrono-level, while the so called distal variables include the social, cultural, moral, legal and religious framework in which the individual lives in. These factors have been approached through a quantitative analysis (survey). A qualitative (focus-group) approach has been also utilized in order to assess the urban factor and the peer influence. The study considered variables at micro, meso and macro-level only. This because, being a descriptive study, variables at chrono-level have not been included as they refer to the time, and variables at eso-level have been analyzed very seldom in the literature. This study considered variables that emerged as cross-cutting factors in the recent literature review (8), taking into account some issues peculiar to the Thai context (2-5, 7, 10-16).

This work had to objective of trying to understand the determinants of risky sexual behavior in order to give a contribution to a better design of health promotion programs.

1.2 Research questions

What does risky sexual behavior mean for adolescent living in Bangkok congested areas? What are the proximal (micro, meso, and macro-level) protective and risk factors related to teenager sexual behavior?

1.3 Research objectives

1.3.1 General Objective

To assess the behaviors related to sexual activity that put adolescent at risk of negative health outcomes.

1.3.2 Specific Objectives

To assess the risky sexual behaviors.

To identify the relationships between some proximal factors and risky sexual behavior:

- Micro level: Sex, age, attending school, being employed, monthly income, alcohol use.
- Meso-level: Family (living with both parents, parental monitoring and communication), peer influence, partner (partner communication).
- Macro-level: Urban context, instant messaging.

To highlight the meanings that adolescents give to sexual behaviors and the related discourse.

1.4 Hypothesis

Adolescent risky sexual behavior is related to: Age, personal income, alcohol use, family structure (if the adolescent is orphan and/or lives with only of the parents and/or the parents are divorced), peer influence.

Adolescent risky sexual behavior is related to: attending school, family structure (living with both parents), talking with partners about reproductive health issues, talking with parents about sex related issues, parental monitoring.

Variables in micro and meso-level could be able to predict adolescent risky sexual behavior.

1.5 Conceptual framework

Due the complex and multilevel nature of sexual behavior and to the fact that it is analyzed in an urban context, the contextual framework for the present work is adapted from the ecological model according to the version developed by Bronfenbrenner (9), that has been adapted by several studies related to adolescent risky sexual behavior. More specifically, the framework of this work is adapted from the one proposed by DiClemente et al. (6), together with the work of Burns and Snow that highlight the role of the built environment (17) and the psychosocial stress.

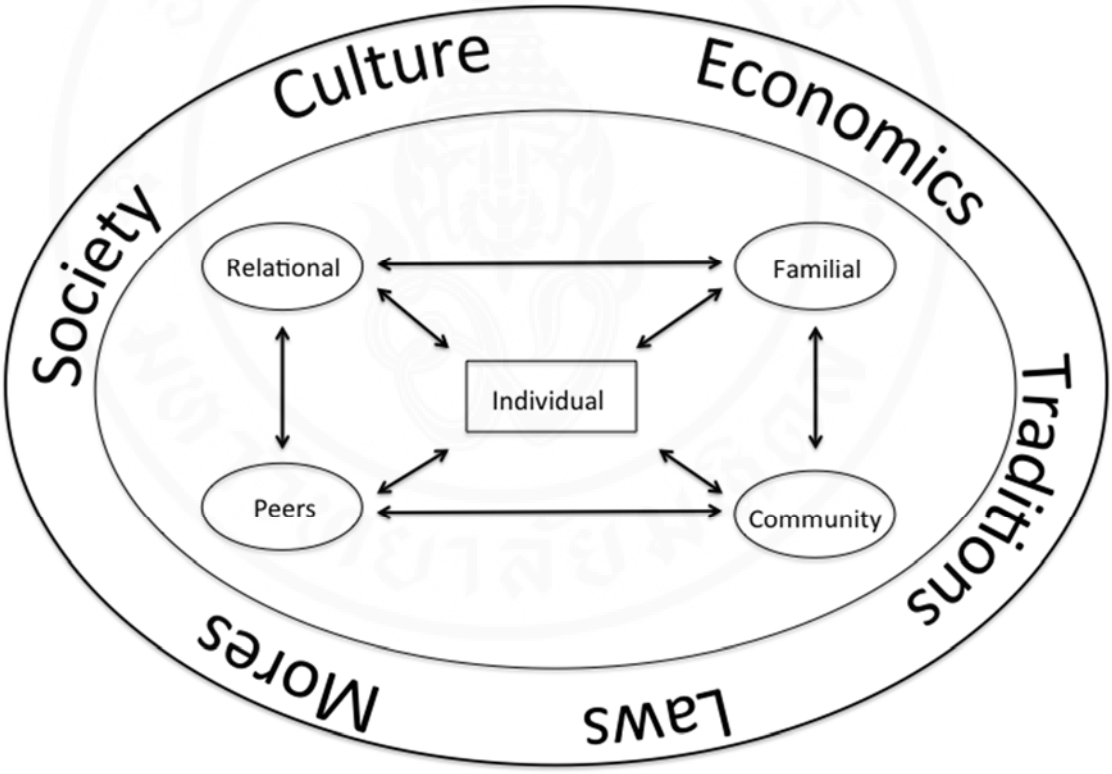

Figure 1.1 Conceptual framework: general model

Source: DiClemente R J, Salazar L F, Crosby R A. A review of STD/HIV preventive interventions for adolescents: sustaining effects using an ecological approach. *Journal of Pediatric Psychology*.2007;32(8).

So there are several levels of factors that, being interlinked, influence the individual behavior. A key feature of this approach is that effective and sustainable interventions should consider the boarder context in which and target not only the

individual but also the factors related to the different levels of the model. In such a framework many explanatory variables can be taken into consideration in order to explain the risky sexual behavior of the teenagers. A literature review recently carried out by Mmari and Sabherval (8) and that focused on adolescent risky sexual behavior in developing countries identified more than 1,000 variables (both risk and protective factors).

In the present work only some of the possible variables that an ecological framework have been included.

- Micro level (individual): age, sex, monthly income, attending school, being employed, alcohol use.
- Meso level: talk with partner about reproductive health issues, family structure (both parents, only one parent, no parent), parental communication and monitoring, peer influence.
- Macro level: urban context, instant messaging.

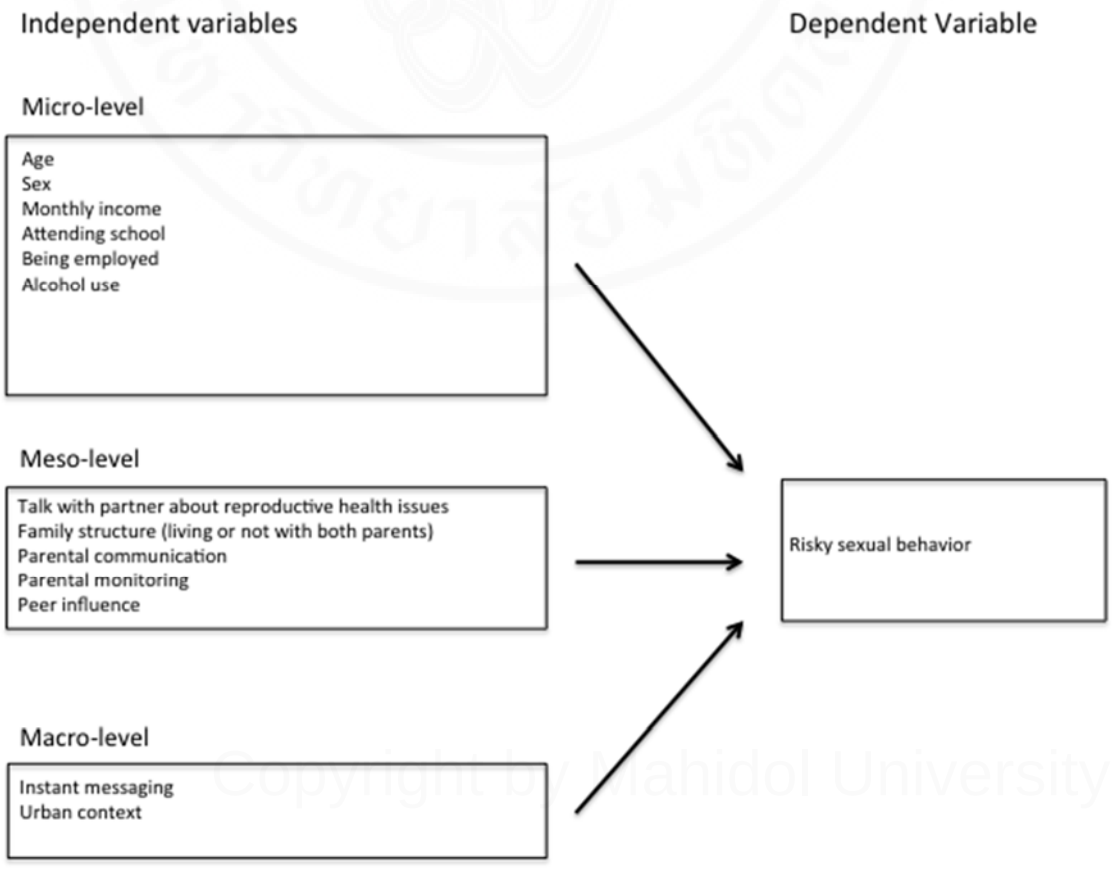

Figure 1.2 Conceptual framework: independent and dependent variables

1.6 Variables

1.6.1 Dependent variable

Risky sexual behavior that means: touching partner genitals, having genitals touched, receiving oral sex, giving oral sex, having sexual intercourse.

1.6.2 Independent variables

1.6.2.1 Micro-level

- Age
- Sex
- Monthly income
- Attending school
- Being employed
- Alcohol use

1.6.2.2 Meso-level

- Talk with partner about reproductive health issues
- Family structure (both parents, only one parent, no parent)
- Talking with parents about sex related issues.
- Parental Monitoring
- Peer influence

1.6.2.3 Macro-level

- Instant messaging
- Urban context

1.7 Operational definitions

1.7.1 Dependent variable

Risky sexual behavior: is a spectrum of behaviors that includes: touching partner genitals, having genitals touched, receiving oral sex, giving oral sex, having sexual intercourse.

1.7.2 Independent variables

1.7.2.1 Micro-level

Age: is the age, measured in years, as self-reported by the respondents.

Sex: either male or female.

Monthly income: is the amount of monthly income from employment and other sources before taxes and other deductions.

Attending school: refers to whether the respondent is still attending school or not.

Being employed: refers to whether the respondent has any full time or part-time job either in the formal or informal sector.

Alcohol use: refers to the use of alcohol before having any of the above mentioned form of sexual intercourse.

1.7.2.2 Meso-level

Talk with partner about reproductive health issues: refers to the whether the respondent and the partner (either stable or casual/occasional) talk about any measure to take in order to avoid STI/pregnancy.

Family structure: refers to three key aspects: the composition (if the respondent lives with both parents or with either the father or the mother only), the parental monitoring over the respondent activities (defined as he acquisition of knowledge about the activities, whereabouts, and companions of one's son or daughter) and the communication about sexual related issues.

Parental monitoring: refers to the acquisition of knowledge about the activities, whereabouts, and companions of one's son or daughter as defined by Guilamo-Ramos et al. (18).

Peer influence: refers to the whether the peers have any influence on the sexual behavior of the respondent.

1.7.2.3 Macro-level

New Media: refers to on-demand access to content anytime, anywhere, on any digital device, as well as interactive user feedback, creative participation. Another aspect of new media is the real-time generation of new, unregulated content. In this work the focus has been on instant messaging.

Instant messaging: a means or system for transmitting electronic messages instantly, like Whatsup, Line, Badoo and WeChat.

Urban context: includes both the social characteristics like, social cohesion and collective efficacy, and physical characteristics of neighborhoods. Social cohesion is defined by Stanley as “the willingness of members of a society to cooperate with each other in order to survive and prosper. Willingness to cooperate means they freely choose to form partnerships and have a reasonable chance of realizing goals because others are willing to cooperate and share the fruits of their endeavors equitably” (19). Collective efficacy is defined by Sampson et al. as “mutual trust among neighbors combined with willingness to intervene on behalf of the common good” (20). Physical characteristics refer to the access to some key basic services like water, electricity, sanitation facilities and type/quality of housing (17).

CHAPTER II
LITERATURE REVIEW

2.1 Concepts of risk and sexual behavior

The concepts of sexual behavior and risk are problematic. Regarding sexual behavior Fantasia et al. raise the importance of considering a broad range of behaviors that go beyond the sexual intercourse (21). They highlight that, often it has been analyzed in a very simplified and reductionist way in a black and white fashion (have sex, not have sex) and considering sex only as sexual intercourse. This extremely simplified approach has limitation and tends to a broad spectrum of sexual behaviors. On the same issue, Akers et al. (22) have considered eight categories of sexual behaviors, dividing them in two main categories: non-penetrative or non-coital and penetrative or coital behaviors (the non-penetrative behaviors are: kissing, having breasts touched, having genitals touched, touching partners genitals and the four penetrative are: oral giving, oral receiving, anal sex, vaginal sex). So, also in this case the authors highlight the importance of including several types of behavior in the sexual behavior category. Furthermore, the word risk/risky maybe defined and thought in different ways. One issue to highlight is the fact that the risk is culturally bounded (23, 24) and that sex is socially constructed being considered as something that is impure, dangerous and shameful (25).

The interpretation proposed by the social anthropologist Mary Douglas considers the risk as something real and concrete, the perception of which depends, however, on the cultural context of each society, leading to the fact that certain situations which are considered to be dangerous in certain communities, are not in others. On the basis of these assumptions, acquires fundamental importance the process of cultural selection that transforms some dangers in serious risks, neglecting or minimizing others. According to Douglas, even if the interpretations of the risks of ordinary people diverge expert estimations, one should not believe to be the result of a poor understanding of the scientific facts, of emotional reactions based on false

beliefs, but should instead consider constructions mediated by cultural interpretive frames (23).

Douglas also studied the concepts of purity, contamination and danger (25). In *Purity and Danger*, Douglas analyzes the concepts and rituals elaborated in the context of different cultures, in relation to contamination, and purity. The thesis advanced in this work is that considering certain things as impure plays a vital role in supporting existing social structures. Cultures adopt certain taboos to structure, through a symbolic system; the moral order of the society, cataloging, through classificatory systems, what can and what cannot be considered acceptable. The aim is to safeguard by actions that could destabilize the social structures. On the basis of the interpretation of cultural function of risk in contemporary Western societies, placing in analogy the society with the microcosm of the human body she hypothesizes that the control of the body can be considered a model of social control. The selection of the pure substances, and therefore safe to ingest reflects similar ideas about the social body, as its boundaries can be maintained solids, by regulating the access of certain kinds of people and excluding others. The risk is, therefore, the cultural result of the violation of a taboo, of crossing a border.

Another point to highlight is that fact that the body is the vehicle through which sex is made and that is itself a complex unit of analysis. Lock and Scheper-Hughes talk about a “mindful body” (26) in response to those approaches that consider the body as a support uninformed and detached from the social context. Underlining the centrality of the notion of the body, in the field of what is called critical medical anthropology, Lock and Scheper-Hughes have proposed to deconstruct the concept of body as this came to us from the Cartesian philosophy, the dichotomy between body and mind, proposing three approaches, by which the body can be observed. The first, which refers to the existential phenomenology, is identified as the individual body and should be understood in its phenomenological sense of the experience. The second is the social body that, in the wake of Mary Douglas, is appropriate for thinking about nature and society in reference to its representations as a natural symbol, and finally, the third, the political body, which is connected to the regulation, supervision and control of bodies, both individual and collective, exercised by the political power. For these authors the “three bodies” at the same time represent three separate units of

analysis but also three different theoretical and epistemological approaches: that of phenomenology (the individual body), that of structuralism and symbolism (the social body) ending with the political body the one related to post-structuralist or critical theory.

Michel Foucault (27), considers the risk as a set of techniques, practices, tactics, strategies and knowledge, more or less formalized, which have the task of giving order to the social world, putting at the same time the uncertainty, typical of postmodern society, under a greater control. Risk is the product of the process of modernization, and expert knowledge are fundamental elements of governmentality (Governmentality is an approach to regulation, social control and management of political power, which emerged in Europe in the sixteenth century, together with the occurring social changes. Become dominant, in the opinion of Foucault, since the eighteenth century, governmentality can be considered as the techniques and strategies by which a society is made governable). Expert knowledge, through normalization, trace the guidelines on how to monitor and regulate populations, preparing them at the time same, to conform to the pre-existing rules. The postmodern man is thus so built within a network of tools and techniques of power. In this framework, the risk is a strategy of power aimed at regulating the population in view of the objectives of neoliberalism.

The concept of governmentality has been applied to the discourses about youth sexuality in Canada (28). Analyzing the dominant discourses about “problems of youth sexual behavior” the authors raised the importance that social forces have o sexual behavior and conclude that “Public health practitioners and researchers are thus facing an important juncture in their work – do we continue to operate within and contribute to a set of dominating discourses that disadvantage and unfairly punish the very youth that we purport to assist? Or, do we acknowledge the powerful role of discourse … to launch our efforts to establish new forms of “talk” that challenge social taboos and stereotypes?”

2.2 Risk and protective factors related to sexual behavior among adolescents

In a recent literature review, Mmari and Sabherwal (8) conducted a review of studies about risk and protective factors affecting the sexual and reproductive health of the adolescent in developing countries. Within an ecological model framework that considers individual, peer and partner, family, school, and community levels the authors nearly 250 articles. The level that has been studied the most is the individual one, followed by the family, the peer and partners, community and school level. At individual level the factors that have been more often analyzed in the literature reviewed are: sex, age, marital status, race, religion/religiosity, employment status, being in school and educational attainment. Concerning the peer and partner level, the factors that more often have been studied were: forced first sex, having multiple partners, partner age, having discussed reproductive health issues with friends, the perception that peers had had sex. Regarding the family level, the factors more frequently addressed by the studies reviewed were: orphan status, place of residence, and communication with parents about sex, sibling who had teen pregnancy and parental education. The number of studies at both school and community level is quite low so no most studied factors emerged in the review.

One point worth to mention is that the review identified some transversal factors (the criteria the authors used is that “at least two third of studies reporting on a given factor had to consistently show it as either risk or protection”) in the studies taken into consideration. At Individual level, the level of education had been found to be a preventive factor while, being married, older, having employment and alcohol drinking emerged to be the most recurrent risk factors. At peer and partner level the presence of peers or friends who had had sex and having forced sex with the first sexual partner emerged to be the most common risk factors while discussing about reproductive health with the partner is a preventive factor. Regarding family level, living in an urban area and being orphan has been identified as the most recurring risk factors while no cross—cutting protective factors have been identified at this level. One remark about the factors identified is that they may be influenced by the location of the studied due to the fact that nearly 60% of them have been carried out in Sub-Saharan Africa.

A less recent review focused exclusively on qualitative studies (29). The rationale for this selection was that qualitative research is very important in order to assess in which ways social and cultural elements influence the sexual behavior of young people (the inclusion criteria about age was 15-24). Through a comparative thematic analysis the authors identified seven key themes: 1) young people assess the sexual risk in a subjective way based on whether their partners are “clean” or “unclean”. This finding has a striking similarity with Mary Douglas analysis of the risk as shaped by the concept of “purity and danger”. The second theme that emerges is that “sexual partners have an important influence oh behavior in general”. The third theme highlights the fact that “condoms can be stigmatizing and associated with lack of trust”. Theme 4 is about the fact that “gender stereotypes are crucial in determining social expectations and behavior”. In other words there are strong similarities in gender behavior expectations. So the way men and women are expected to be in the domain of sexual behavior are quite similar all around the world (men are expected to be highly heterosexually active and that women chastity and virginity at marriage receives a high social value). Theme 5 is related to social sanction, as “there are penalties and rewards for sex from society”. Related to that there is the fact that some behavior and practice may be very attractive and desirable for some groups (like the teenagers) due to the fact that they are considered by the society by being very risky of even taboo. From this theme similarity with Mary Douglas analysis of risk selection by different groups emerge. Theme 6 highlights the importance of reputations and stigma that may arise from lack of reputations as “reputations and social displays of sexual activity or inactivity are important”. Theme 7 highlights the roles played by pressures and expectation played by the society of which young people are members, as “social expectations hamper communication about sex”. This may lead to the fact that women are often reluctant to talk about sex and sexual desired making the planning of sex (especially safe sex) more and more complicated. One important issue emerging from the study is that sexual behavior in from one side highly influenced by social determinants and that at the same time these determinants are pretty similar around the world.

Another important feature emerging from the literature is that not only sexual behavior is a complex and socially informed issue but also that risky behaviors

tend to co-occur. Taking into account, individual, peer, family and neighborhood characteristic, according to Bronfenbenner Ecological Model, Hair et al. (30) have identified 4 profiles of risky behavior (both sexual and non sexual behaviors): The groups were ranging through a spectrum from low risk with absence of risky behaviors and presence of healthy behavior (exercise), to high-risk were all the risky behaviors were present. In between there were two moderate risk categories It is worth to mention that unsafe sex is a behavior that is present in both class of moderate risk.

About co-occurrence of risky behaviors Wu et al. (31) found temporal connection between conduct problems, substance use and risky sexual behavior, highlighting the importance of a better understanding of the developmental pathways of the above mentioned behaviors in order to have a proper identification of the relevant risk and protective factors related to them.

Regarding Thailand, Vuttanont et al. (15), carried out a study aimed at identifying the sexual education needs among Thai students. Highlighting the issue of Thailand as society in transition characterized by "coexistence in a society of traditional and contemporary values and lifestyles" the authors identified five broad topics.

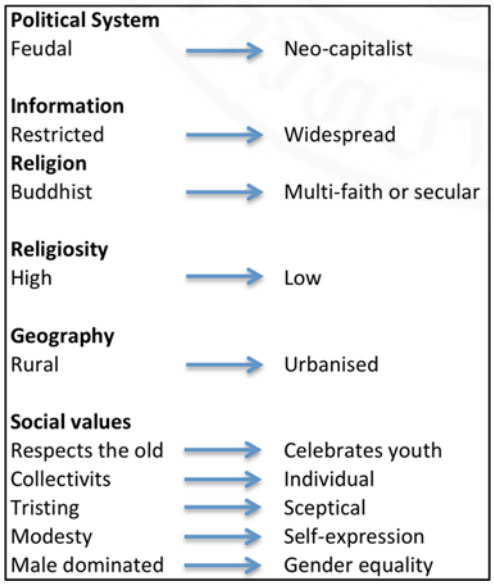

Figure 2.1 Thailand in transition

Source: Vuttanont U, Greenhalgh T, Griffin M, Boynton P. "Smart boys" and "sweet girls" – sex education needs in Thai teenagers: a mixed-method study. *The Lancet*, 2006; 368(9552).

The topics the come out from the study are: “role ambiguity and confused identity; awareness, curiosity, and desire; knowledge and skills gaps; limited parental input; and impulsivity, risk taking, and coercion”. One interesting outcome of the study is that “teenagers in this study had a dual value system and conflicting aspirations”, as they oscillate between modernity (a gender role oriented and favorable towards premarital sex) and traditional values (modesty, virginity for girls and respect and obedience toward parents).

2.2.1 Micro

2.2.1.1 Individual

Bell (32), using a qualitative approach (discussion group) analyzed the role of embarrassment as factor preventing condom use among different groups of adolescents of different age in the UK rural areas. Data analyzed through a Grounded Theory approach highlighted that embarrassment was the main barriers to access or use condoms. This in order to avoid facing events that could lead to embarrassment that in turn may hamper the status and the reputation of the adolescents.

Khumasen and Gary (7) analyzed the determinants of actual condom use among Thai adolescent (vocational students 18-21 years). The study, based Bandura self-efficacy model of safer sex found three main explicative factor of condom use: self-reported history of alcohol/drug use (the higher is the drug/alcohol use the lower in the use of condoms), attitudes toward condom use (the more positive is the attitude, the higher was the use), condom use self-efficacy (the higher the self-efficacy, the higher the condom use). The study also found that gender, age, relationship duration, knowledge about STD, HIV and pregnancy, perceived preventive behavioral peer norms were be not statistically significant. Based on those findings the study was only partially consistent with Bandura self-efficacy model of safer behavior.

Sipsma et al. (33) analyzed the role of pregnancy desire among female adolescents. Contrary to the assumption that teenage pregnancy is unintended and the outcome of poor or lack of contraception the authors demonstrated that in some teenager there is desire or ambivalence towards pregnancy. This issue should be

taken into proper consideration when designing the interventions in the field of adolescent sexual health.

Reese et al. (34) have shown that the way adolescents have their sexual initiation is associated with the likelihood of pregnancy. Taking into account “the order and timing of initiating different types of sex”, the authors found that modality of sexual initiation are more likely to lead to teenage pregnancy.

Regarding Thailand, Powwattana and Ramasoota (12), compared the predictors of sexual behavior between sexually active and non-active adolescents in Bangkok. The study found among others that risk increase with age, and co-occurrence of risky behaviors as sexually active adolescents smoke and drink more than non-actives. Another interesting finding is the role played by the power differentials: the lower was the power perceptions the higher the chance of engaging in risky sexual behavior.

Chaveepojnkamjorn and Pichainarong studied the role of drinking on risky sexual behavior among male high-school students in Thailand and found significant association (11).

In conclusion, variables at individual level have been widely considered in the literature including Thailand, highlighting the presence of several variables, like condom use, pregnancy desire, sexual initiation, age, alcohol, and co-occurrence of risky behaviors as well.

2.2.2 Meso

Sridawruang et al (14), analyzed attitudes of both adolescent and partners regarding to premarital sex in Thailand. The study, a qualitative focus-group analysis that involved late adolescents 15-19 years old and their parents, highlighted four major themes: social judgment of girls, boys have nothing to lose, considering risks, and parents as problem solvers. Family reputation is a very important issue for the family of the girl involved in premarital sex but is by far less important while concerning the family of the boy. Boys have less and less pressure when involved in premarital sex as they do not have that much to lose. Virginity loss by a girl marks an important change in her life as this means the ruin of a very important value in Thai society. Another issue coming out from the study is that power relations between boys and girls are

uneven (boys have more power than girls). Other characteristic related to teenager highlighted by the study are that if something goes wrong and teenager are not able to solve the issue among themselves family is the last resort; teenagers have a little consideration of the risks that may arise from risky sexual behavior, and that they tend not to talk about sex with their parents. The problem solving approach in quite different between teenager and parents: while the parents tend to prefer the preserve the pregnancy and look for a long term solution (either marriage or financial compensation) teenagers tend to opt for an interruption of pregnancy through an abortion.

2.2.2.1 Sexual partner

Staras et al. (35) highlighted the significance that a risky partner has on the use of condom and stressed out the importance of including this variable in the design of interventions.

2.2.2.2 Family

A study carried out in Thailand analyzed the influence of parents spirituality in on the health risk behavior of young adolescent in Bangkok. Chamratrithirong et al (10), found a negative association between patents spirituality and adolescent risk behaviors. This may partially explain the increase in risky sexual behavior due to the increasing external influences on Thai culture, hampering the strength of the transmission of these traditional values to the new generations.

Rhucharoenpornpanich et al. (13) highlighted that parent-adolescent communication about sex related issues is not common in Thailand and found that one of the triggering factors that led the parents to talk about sex related issues is the perception that their children have started to be sexually active, so this may delay the starting moment of the communication when sex (and the potential negative consequences) already happened. They pointed out the importance of programs aimed at reducing the communication barriers between parents and adolescents about sexual related issues.

In conclusion family is a crucial variable in influencing the sexual behavior of the adolescents with cultural values and changes in the society (from traditional to contemporary) playing a very important role in the level and kind of communication.

2.2.2.3 School

Chaikoolvatana et al. (5), developed a school-based pregnancy prevention model for Thai adolescents, highlighting the importance of the role of the school on adolescent risk sexual behavior.

Vuttanont et al. (15), suggested some approached that could be developed to improve sex education in a society in transition like Thailand.

In conclusion, school and school based reproductive health education is a very important variable especially in contexts affected by social changes.

2.2.2.4 Peer

Prinstein et al. (36) highlighted the importance of understanding how the peer context influences the health risk behaviors of the adolescents. Focusing on the concept of peer popularity they show that adolescent tend to adhere to norms that "are associated with valued peers" they found an association between high level of popularity and number of sexual partners among males (but not among females).

Ali and Dwyer (37), pointed while highlighting out the difficulties in estimating peer effect on sexual behavior found a significant role that peers have on it. This raise the importance in considering this variable in the design of policies and intervention program aimed at tackling this issue.

To sum up, peers play a pivotal role on the sexual world (and behavior) of the adolescents. Due to complexity of the phenomenon the effects are multiple and not easy to identify.

2.2.3 Macro

2.2.3.1 Instant messaging

O'Hara et al. (38) have analyzed the effects of movies on sexual behavior and alcohol use. The study found that media have a significant effect on sexual behavior, and that gender is a mediating factor as the effect are less significant among women compared to men. One important point stressed by this study is the complex nature of movie influence on adolescents. The study also pointed

out the importance of proper and stricter movie rating in order to minimize dangerous exposure.

Braun-Courville and Rojas (39) found that significant association between exposure to the so-called sexually explicit websites and sexual behavior as adolescent exposed are more likely to engage is risky sexual behaviors.

One issue emerging from the most recent literature is the role that new media (like the Internet and social media) have on risky sexual behavior. In this broad field of studies, a very recent factor emerging from the literature is sexting (40-43), whose influencing role on adolescent sexual behavior is emerging in studies carried out in the United States. Dake et al. (43)found significant association between sexting and risky sexual behavior (like high number of partners and not using contraceptive).

In conclusion, media have been found to play a role increasing the level of risky sexual behavior among adolescents. There is a growing literature on new media, like the Internet and more recently sexting.

2.2.3.2 Urban context

Urban is emerging itself as a determinant of health (44, 45). At the moment the majority of the world population lives in urban context and this and a proper analysis and a better understanding on this complex context requires a multidisciplinary approach. As mentioned above urban is one of the transversal determinants of risky sexual behavior (8).

2.3 Theoretical model

Bronfenbrenner, developed a theoretical framework that consider five levels: In this model each level influence each other as they are interlinked. (9) According to the author, the model has two key features: The first one is that human development is characterized by the interaction between a human organism “and the persons, object and symbols in its immediate environment” and that the effectiveness of these interactions is positively related to the frequency they take place. These interactions are called by the author “proximal processes”. The second feature of the model is that “the form, power, content and directions of the proximal processes” are

related to three interdependent factors: “the characteristics of the developing person; of the environment, both immediate and more remote - in which the processes are taking place; and the nature of the developmental outcomes under consideration” (9). Based on these two characteristics the “ecological environment” is formed by a system of different concentric layers, “like a set of Russian dolls”. These layers are: microsystems, mesosystems, exosystems, macrosystems and chronosystems.

DiClemente et al. (6) while recognizing the efficacy of approaches focusing on individual level, raised the concern that such kind of interventions are less and less effective over time. So they proposed an ecological framework model in order to get a better, deeper understanding of sexual risk behaviors that can help in designing more sustainable and long lasting interventions.

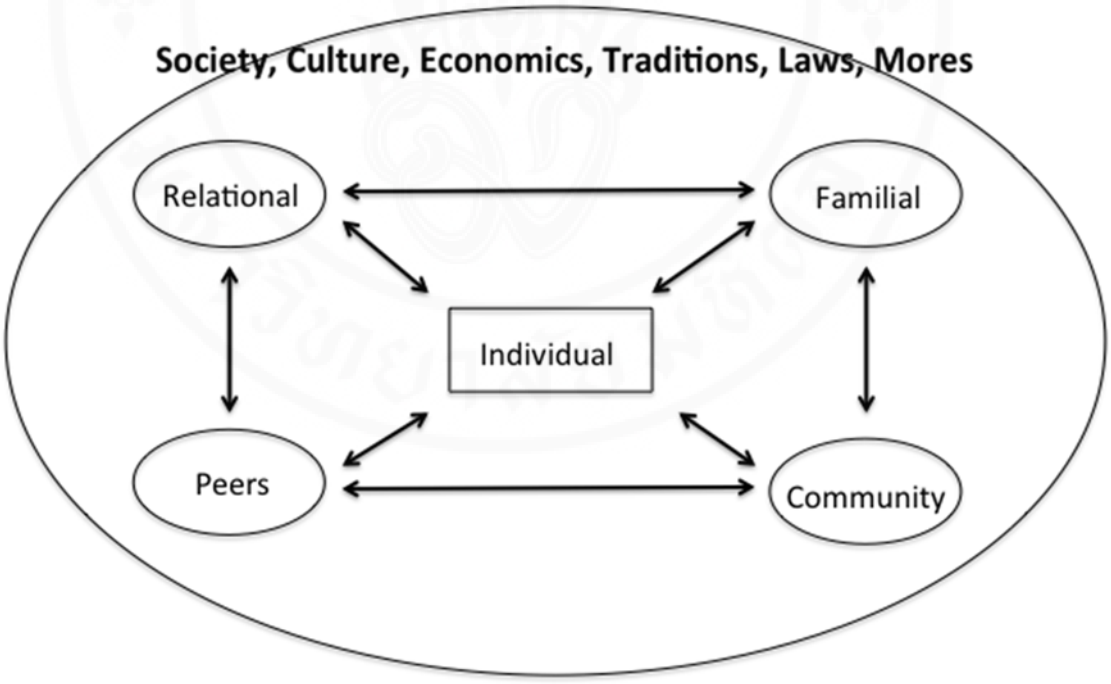

Figure 2.2 Ecological model of adolescent risky sexual behavior

Source: DiClemente RJ, Salazar LF, Crosby RA. A review of STD/HIV preventive interventions for adolescents: sustaining effects using an ecological approach. *Journal of Pediatric Psychology*.2007; 32(8).

According to the proposed model the individual in placed in a proximal context that is formed by family, peers, community and sexual relationships. This

context in then part of a broader distal context of the society that is shaped by economics, values, traditions, laws and so on. Is this model there are mutual relationships between distal and proximal elements, the former influencing the latter. So, this model stresses the importance of different areas of influence that interact among each other. According to the authors “Understanding the complex web of influences that affects adolescents’ STD/HIV-associated risk behavior is critically important to the design and implementation of risk reduction interventions and public health and prevention education policy”.

In a study about the influence of built environment on youth sexual risk behavior in Cape Town, South Africa, Burns and Snow (17), develop a conceptual framework of to explain risky sexual behavior. The term built environment in utilized in order to try to distinguish between physical and social environment of a neighborhood. The authors refer to built environment as a useful concept to address key “material conditions of slum neighborhoods in poorer countries and defines the built environment as access to four key basic services: 1) water, 2) electricity, 3) sanitation facilities, 4) type and/or quality of housing. The authors also propose an alternative terms to be used interchangeably with built environment: “structural characteristics of neighborhoods”. The authors highlight the important role that the neighborhood plays on adolescent risky sexual behavior and that is important to take into account not only the social (like social cohesion, social mobilization, and collective efficacy) but also the physical characteristics of the neighborhood (like physical infrastructure and housing standard). These two aspect combines together can be seen as the influence that the urban context plays on the adolescent risky sexual behavior. The model proposed by the authors highlight that, especially in Low Middle Income Countries, not only social, but also physical characteristics of the environment have a significant effect on youth sexual behavior. According to the model there are forces at macro level that determine the access to the resource available in the society and that are “mediated through the built environment”. Societal resources, then, may have several influences on the individual, including sexual behavior. The model is made by four constructs or pathways that influence sexual risk behavior: the political and economic structure, the neighborhood built environment, the social environment and the stress, that is included to take into account the fact that the built environment

may be either a source of stressors (lack of transport, poor sanitation) or support (presence or recreational structures). It is important to note that the authors while recognizing the relevance of the material conditions highlight the fact that the factors considered in the model interact among each other and that the macro-level forces, so that structural causes more are one of the elements but not the starting point in the analysis between the broad category of neighborhood effects and sexual risk behavior.

In conclusion, the variables that influence adolescent sexual behavior are several and belong to different levels. This confirms the complex and multidisciplinary nature of the problem. For this reason a model that goes beyond the individual behavior and looks further to both factors close to the individual and the broader context in which the individual in placed is crucial for a sound analysis of this issue.

CHAPTER III
MATERIALS AND METHODS

3.1 Research design

This is a descriptive study.

3.2 Study site

The initial plan was to conduct the study in two congested areas of Bangkok, selected on the basis of accessibility to the area and willingness and availability of the Community Health Volunteers to support the study. The areas were:

- Tuk Daeng (Bang Sue District)
- Highway Department (Rajthevi District)

Due to the difficulties in reaching Highway Department and to the level of participation in Tuk Daeng and to the political situation in Bangkok at the time of data collection the study was finally been conducted in four congested areas of Bangkok, selected on the basis of accessibility to the area and willingness and availability of the Community Health Volunteers to support the study. The areas are:

- Railway Community (Bang Sue District)
- Tuk Daeng (Bang Sue District)
- Rim Klong Sam Saeng (Rajathevi District)
- SoiSauanNoeng(Phaya Thai District)

3.3 Study population

Late adolescent (both males and females) living in the above mentioned Bangkok congested areas (see 3.2): people aged 15 to 19 years old.

3.3.1 Inclusion criteria

Males and females aged 15-19, living since at least 6 months in the study sites. Respondents should be able to read and write in Thai.

3.3.2 Exclusion criteria

People that did not show up for answering the questionnaire.

3.4 Sample size determination

The initial plan was to collect data in the two congested areas mentioned in paragraph 3.2 Population for Tuk Daeng congested area is equal to 92 (43 males and 49 females) and for Highway Department congested area is equal to 24 (12 males and 12 females). This number was obtained by multiplying the total population of the areas by the percentage of people aged 15 to 19 living in Bangkok, as data for that class of population in each of the areas was were not available. Due to the relatively small number, all the people in the class age of analysis were supposed to be included in the sample, with an expected response rate is 80%. This gave an expected number of subjects equal to 93 (80% of 116). Due to the difficulties mentioned above (see 3.2), the sample has been modified to a purposive sampling with almost the same initial number of respondents.

3.5 Sampling technique

As mentioned above, according to the initial plan, all the subjects whose age between 15-19 have been included, as the criteria addressed in inclusion criteria. For the qualitative part, the focus group discussion has been carried out among some of the subjects that answered the questionnaire in order to highlight and have a better understanding of some meso and macro-level variables: peer influence, urban context, and new-media. The number of participants to the focus group discussion was planned to be around 10 in Tuk Daeng, and due to the limited number of people in Highway Department the number of subjects to the focus group could have been smaller (about 6-7 males and females respectively). Due to the change in initial plan it was decided to

have four focus group discussions (two for females and two for males) in the four selected congested areas, based on respondent willingness to join the focus group discussion. As reported in below (see par. 3.7) the number of subjects joining the FGD was about 10 only in one of them.

3.6 Data collection tools

The research method for the present study has been a combination of quantitative and qualitative tools. For the quantitative part, a structured questionnaire has been used. For the qualitative part, focus groups, separately for male and female groups, have been carried out in some of the identified areas (see above 3.2)

The questionnaire is divided into two parts:

- Personal characteristic
- Sex related behaviors

Variables that have been measured using the structured questionnaire are:

Dependent variable has been measured asking to the respondents if they had one of more of the five types of sexual practices identified in chapter 1, in a pre-coded way asking the respondents to thick one of more of the boxes related to each practice.

Independent variables that have been measured are the following ones.

Age has been measured asking the respondent to thick the box corresponding to her/his age (in a range between 15 to 19 included). Sex has been measured by asking the respondent to thick the related box (pre-coded). Having a partner in the last six months has been measured using a dichotomous choice (pre-coded) question yes/no type. Partner age has been measured with an open question asking the respondent to write it down. Highest level of education has been measured with a pre-coded question with three options: primary school, secondary school, and high school/college. If the respondent was still studying has been measured using a dichotomous choice (pre-coded) question yes/no type. If the respondent had a job has been measured with a pre-coded question with three options: full time job, part-time job, no job. The monthly income of the respondent (if any) has been measured using an interval scale (pre-coded) asking the respondent to thick the relative box (no

income, <3,000 Thai Baht/month, 3,000-5,999 Thai Baht/month, 6,000-8,999 Thai Baht/month, 9,000-14,999 Thai Baht/month, more or equal to 15,000 Thai Baht/month). The family composition has been measured asking the respondent if she/he lived with: both parents, mother only, father only, grandmother (pre-coded) or any other family composition (to be specified by the respondent).

The following nine question were adapted from CDC, 2013 Youth Risk Behavior Survey (46) and were aimed at measuring age and frequency of sexual behaviors if any. One question was aimed at asking at which age the respondent had any of the sexual behaviors considered in the present study. Another question was aimed at asking at which age the respondent had her/his first sexual intercourse. Another question was aimed at asking with how many different partners the respondent had any of the sexual behavior taken into consideration. The next one had as objective to quantify with how many different partners the respondent had sexual intercourse only. The two successive questions asked the same questions of the previous two but limited at the last 3 months. The next two questions focused on alcohol consumption and condom use. They are both yes no type and the one about condom use foresee the possibility that the respondent never had sexual intercourse. The last question adapted from the CDC Youth Risk Behavior Survey was about the method used in order to prevent pregnancy the last time that the respondent had sexual intercourse. Level of risky sexual behavior has been classified into four levels by groping the type of sexual activities: low level (no sexual activity, and/or touching genitals and/or having genitals touched); medium level (giving and/or receiving oral sex); high risk (sexual intercourse using condom); very high level (sexual intercourse without condom).

The variable related to the communication with the partner about reproductive health issues was measured through four question measured with a four level Likert scale (talking about use of condom, personal hygiene, preventing STI, preventing pregnancy).

The variable regarding parental monitoring was measured through eight questions (“My parents know with which people I go out”, “When I go out and late my parents know where I am”, “I talk to my parents about the plans that I have with my friends”, “When I go out at night my parents know where I am”, “My parents

know and get used to my friends", "My parents know my friends' parents" "My parents know which TV program I watch", "My parents control and know what I do with the computer and internet") adapted from Borawski et al. (47) and were measured through a 4 level Likert scale (from never to always).

The variable about parental communication was measured through four questions adapted from Aspy et al (48). The questions ask "My parents and I have talked about what is right and wrong in sexual behavior", "Have you talked to your parents about delaying sexual activity?", "Have you talked to your parents about birth control?", and "Have you talked to your parents about preventing STDs?". The questions were measured with a four levels Likert scale (from never to always). The variable about peer influence is measured through two questions (with a five levels Likert scale (from strongly agree to strongly disagree). Cronbach-alpha test for parental communication and parental monitoring is 0.849 and 0.857 respectively.

In order to classify two groups, the variables measured through a score obtained with multiple questions have been grouped into two levels, High and Low, according to the following criteria:

Table 3.1 Classification of score of meso-level variables

	Range	Low	High
Partner communication	4 – 16	4 – 11	12 – 16
Parental monitoring	8 – 32	8 – 23	24 – 32
Parental communication	4 – 16	4 – 11	12 – 16
Friend influence	3 – 13	3 – 9	10 -13

The variable new media/instant messaging was measured through a set of three questions aimed at measuring: if the respondent has a smartphone or not (dichotomous choice yes/no type), if she/he use instant messaging applications (dichotomous choice yes/no type) and the purpose of using instant messaging (multiple choice questions: general chatting (no sex), sex related chatting with known partners, looking for new partners).

Questionnaire has been drafted in English language by the researcher, then translated into Thai language and then back translated into English by the research assistants, and was checked for the consistency of translation.

Focus group had the objective to try to have a better a deeper understanding of the meaning associated to sexual behavior, of peer influences, of the effects of living in a congested area. The focus groups were planned to be four:

- Separated by gender. This means that focus groups have been carried out separately for males and females
- About 10 participants per focus group. Due to the sensitivity of the topic.

The questionnaire for focus group discussion acted as a guideline for the moderators, (see annex 1). This allowed the different moderators to raise the same issues in the different discussions and in the same order.

Questionnaires have always administered first and then in case of acceptance from the participants to join the FGD was carried out later on (but in the same day).

The researcher was always present during data collection and observed two or the three FGD (two of them took place at the same time, so the researcher was unable to observe both).

3.7 Response rate and focus group participation

At the end of the data collection period (from January 19th till February 4th) 99 valid questionnaires have been collected and three focus group discussions have been carried in the above mentioned congested areas (see 3.2). two focus group with female participants (one in Railway community with ten participants and the other one in Rim Klong Sam Saeng with two participants) and one with male participants (in Rim Klong Sam Saeng with four participants). Males were less willing to join the focus groups discussion and for this reason only one focus group was carried out among them.

3.8 Data collection procedure

Due to the nationality of the researcher (Italian) and the related language barriers (the study has been carried in Bangkok in Thai language), the work has been possible with the support of Thai research assistants.

Research assistants have been trained in order to explain the purpose of the research to the Community Health Volunteers and Community Leaders first. Once in the selected areas they have, with the support of either the Community Health Volunteers or the Community Leaders, approached the subjects, explained to them the purpose of the research, introduced the researcher to them, gave them the information sheet and the consent form and the questionnaires and asked them the willingness to participate into focus group discussion.

Data collection has been carried out by trained interviewers, with the support of the Community Health Volunteers. These interviewers are the three research assistants of the present study.

The main steps of the data collection process are the following ones:

Data collection started after getting the ethical clearance from Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University (Ethical clearance No. MUPH 2014-021). Ethical clearance was got on January 14th and data collection started on January 19th.

The interviewers went to the congested areas and gathered the target population with the support of the Community Health Volunteers and the Community Leaders and the presence of the researcher.

The purpose of the research has been illustrated to the target population and the written consent form distributed. It was also asked the interest in participating to a focus group discussion. In case of positive answer a separate consensus form for the FGD have been given to the respondent asking them to sign or if below legal age to be signed by one of the parent or the legal representative

Another appointment has been fixed for the administration of the questionnaire to the target population.

A fist look to the answers was given in order to get some additional inputs for the focus group discussion.

The moderators of the focus group discussions were the research assistants with the presence of the researcher the same day of the questionnaire administration.

3.9 Data analysis

3.9.1 Data entry and editing

Data have been entered using EpiData. Data consistency of all the variables has been checked while entering the data. Data have then been exported into SPSS. This in order to minimize data entry error (EpiData allows to put some control while typing the data).

3.9.2 Data analysis

Data have been analyzed using SPSS version 18. For the general characteristic of the respondents descriptive statistics have been used. Mean and standard deviation have been calculated for each of the quantitative explanatory variables.

The dependent variable, risky sexual behavior has been first classified into four levels based on the sexual activities practiced by the respondents, according to what stated in question n.11.

Chi square and binary logistic regression have been used in order to identify the relationships between the variable considered and the sexual behavior.

Table 3.2 Regrouping of levels of risky sexual behavior

levels risk of sexual behavior (4 categories)	levels risk of sexual behavior (2 categories)
Low Medium High	Low Risk
Very high	High Risk

Table 3.3 Binary classification of independent variables

Variable	Value	
	0	1
Age	15-17	18-19
Gender	Female	Male
Attending school	Yes	No
Having a job	No	Yes
Income	No	Yes
Alcohol	No	Yes
Partner communication	High	Low
Parental monitoring	High	Low
Parental communication	High	Low
Friend influence	Low	High
Instant messaging	Chat only	Talking about sex and/or looking for new partners

Data have then been grouped and stratified from three to two categories: low or high level of risky sexual behavior according to the criteria shown in Table 3.2. Answers have been regrouped too (Table 3.3): age has been classified into two levels 15-17 and 18-19 (based on the criteria of dividing subjects below and subjects above legal age), and attending school, occupational status, income status, living arrangement, and instant messaging have been made dichotomous. Partner communication, parental monitoring, parental communication, and friend influence has also been made dichotomous based on the criteria showed in Table 3.3.

The FGD have been carried in Thai language by research assistants: they wrote down the key messages of the discussions (due to the sensitivity of the topics it was decided not to record the discussions) and then translated into English in order to allow to the researcher to carry out the analysis.

The qualitative analysis have been then carried out in a very simplified way, without coding the items and a proper thematic analysis, based on a combination and comparison of the English transcripts from the original Thai notes taken by the moderators. Each FGD have been written down in Thai and translated into English by different person the three research assistants). This factor has to be taken into careful consideration as different people may have reported things differently and, even more important, translated into different ways.

3.10 Ethical considerations

Ethical clearance has been obtained from the Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University. Written consent has been obtained by both respondents and their parents (for respondents below the legal age, e.g. below 18 years old). Due to the sensitivity of the topic and the age of the respondents great emphasis have been posed on the how to approach the respondents and how to address the questions. Written consent has been obtained asked to respondents and for those below legal age (e.g. below 18 years old) to their parents or legal representative.

The consent process has been structured as follows:

a) Survey:

1. The adolescent has been invited to join the survey
2. Written consent form for the parents have been given to them
3. Once the form has been given to them an appointment for the data collection has been arranged or data have been collected soon after the consensus was obtained.

b) Focus group:

Once adolescent for focus group have been selected a written consent form for the parents was given to them and once signed and collected the focus group discussion had been carried out.

CHAPTER IV
RESULTS

This descriptive study was carried out in four congested areas of Bangkok (Railway community, Tuk Daeng, Rim Klong Sam Saeng and Soi Sauan Noeng), interviewing 99 late adolescents (both male and female) and carrying out three focus groups (one in Railway community with female and two in Rim Klong Sam Saeng separately for female and male) from January 19th till February 4th 2014. Being a combination of both quantitative and qualitative techniques, the results are presented first for the quantitative part (survey) and then for the qualitative one (focus group discussion).

4.1 Quantitative analysis

4.1.1 General characteristics of the respondents

The main general characteristics of the respondents can be summarized as follows (Table 4.1). Average age is 17.3 (with a standard deviation of 1.5). The most frequent class of age is 19 (32.3%) while the less frequent one is 17 (11.1%). Females (57.6%) are more than males (42.4%). The most frequent educational status is secondary school and 61.6% of them are still attending school). The majority of them have neither o job (63.6%) nor an income (54.5%). A large proportion of the respondents live with both parents (66.7%). The majority of them (66.7%) had sexual intercourse (this is the most frequent sexual activity, followed by touching genitals) and only 28.3% had no sexual activity at all. A very small proportion of the respondents declare to use alcohol before having sexual intercourse (8.1%)

Table 4.1 Characteristics of demographics, lifestyles and sexual behaviors of adolescents (n=99)

Variables	Number	Percent
Demographics		
Age (years)		
15	20	20.2
16	14	14.2
17	11	11.1
18	22	22.2
19	32	32.3
($\bar{x}$, SD)	17.3 (1.5)	
Gender		
Male	42	42.4
Female	57	57.6
Educational level		
Elementary school	9	9.1
Secondary school	59	59.6
High school/college	31	31.3
Attending school		
Yes	61	61.6
No	38	38.4
Having a job		
No	63	63.7
Full time	13	13.1
Part time	23	23.2
Income (Baht)		
<3000	9	9.1
3000-5999	10	10.1
6000-8999	13	13.1
9000-14999	10	10.1
>15000	3	3.0
No income	54	54.6
Living arrangement		
Both (father and mother)	66	66.7
Mother only	16	16.2
Father only	8	8.1
Grandmother	2	2.0
Other	7	7.0

Table 4.1 Characteristics of demographics, lifestyles and sexual behaviors of adolescents (n=99) (cont.)

Variables	Number	Percent
Lifestyles		
Alcohol drinking before sexual intercourse (n=66)		
Yes	8	12.1
No	58	87.9
Instant messaging use (multiple response, subjects can answer more than one item) (n=97)		
Chat only	63	64.9
Talking about sex with known people	19	19.6
Looking for new partners	14	14.4
Other	3	3.1
Sexual behaviors		
Sexual activity (multiple response, subjects can answer more than one item)		
Touching genitals	43	43.4
Having genitals touched	29	29.4
Giving oral sex	14	14.1
Receiving oral sex	12	12.1
Sexual intercourse	66	66.7
No sexual activity	28	28.3
Condom use last time had sexual intercourse		
Yes	23	34.8
No	43	65.2
Contraceptive method used last time had sexual intercourse		
Pills	30	45.5
Condom	23	34.8
Withdrawal	5	7.6
Other	4	6.1
No method	4	6.1

The dependent variable, risky sexual behavior has been first classified into four levels based on the sexual activities practiced by the respondents, according to what stated in question n.11 (see 4.2):

Table 4.2 Classification of risky sexual behavior

Level of risky sexual behavior	Type of sexual activity	Female		Male		Total	
		Number	Percent	Number	Percent	Number	Percent
Low	No sexual activity Touching genitals Having genitals touched	26	78.8	7	21.2	33	100.0
Medium	Giving oral sex Receiving Oral sex	0	0.0	0	0.0	0	0.0
High	Sexual intercourse using condom	6	26.1	17	73.9	23	100.0
Very High	Sexual intercourse without condom	25	58.1	18	41.9	43	100.0

As none of the respondents practiced oral sex only (either giving or receiving or both) there are no respondents falling into the category of medium level of risky sexual behavior (see Table 4.2). The age of the low risk level is lower than the one of high and very high risk (p-values <0.001 in both cases), while there is no difference in the age of the high and very high groups (p-value 0.991 in both cases). We may also notice that the gender imbalance in the low risk group as the percentage of female is 78.8%. In all three categories the most frequent level of education is secondary school. The percentage of people attending school decreases with the increasing of the level of risky sexual behavior. The most frequent living arrangement for all categories is living with both parents. Alcohol use is zero for low risk and very low in high and very high risk (8.7 and 14% respectively). It is worth to highlight that the most frequent method to prevent pregnancy in the high risk groups is pill (69.8%) followed by withdrawal (11.6%).

Table 4.3 Characteristics of demographics, lifestyles and sexual behaviors of adolescents by level of risky sexual behavior

Variables	Level of Risky Sexual Behavior		
	Low (n= 33) (%)	High (n= 23) (%)	Very High (n= 43) (%)
Demographics			
Age (years)	16.0 (1.3)	18.0 (1.2)	18.0 (1.2)
15	48.5	8.7	4.7
16	27.3	0.0	11.6
17	6.1	21.7	9.3
18	12.1	26.1	27.9
19	6.1	43.5	46.5
($\bar{x}$, SD)	16.0 (1.3)	18.0 (1.2)	18.0 (1.2)
Gender			
Male	21.2	73.9	41.9
Female	78.8	26.1	58.1
Education level			
Elementary School	6.1	4.3	14.0
Secondary School	54.5	52.2	67.4
High school / College	39.4	43.5	18.6
Attending School			
No	6.1	43.5	60.5
Yes	93.9	56.5	39.5
Occupational status			
No job	87.9	52.2	51.2
Full time job	3.0	17.4	18.6
Part time job	9.1	30.4	30.2
Income (Baht)			
No income	72.7	47.8	44.2
<3,000	9.1	8.7	9.3
3,000-5,999	6.1	13.0	11.6
6,000-8,999	6.1	17.4	16.3
9,000-14,999	3.0	13.0	14.0
>15,000	3.0	0.0	4.7
Living arrangement			
Both parents	75.8	73.9	55.8
Mother only	12.1	13.0	20.9
Father only	6.1	8.7	9.3
Grandmother	0.0	0.0	4.7
Other	6.1	4.3	9.3

Table 4.3 Characteristics of demographics, lifestyles and sexual behaviors of adolescents by level of risky sexual behavior (cont.)

Variables	Level of Risky Sexual Behavior		
	Low (n= 33) (%)	High (n= 23) (%)	Very High (n= 43) (%)
Lifestyles			
Alcohol drinking before sexual intercourse			
Yes	0.0	8.7	14.0
No	0.0	91.3	86.0
Never had sexual intercourse	100.0	0.0	0.0
Sexual behavior (multiple behaviors)			
Touching genitals	15.2	47.8	62.8
Having genitals touched	3.0	21.7	53.5
Giving oral sex	0.0	4.3	30.2
Receiving oral sex	0.0	4.3	25.6
Sexual intercourse	0.0	100.0	100.0
Pregnancy prevention method			
Pills	0.0	0.0	69.8
Condom	0.0	100.0	0.0
Withdrawal	0.0	0.0	11.6
Other	0.0	0.0	9.3
No method	0.0	0.0	9.3
No sexual intercourse	100.0	0.0	0.0

Focusing on the variables measured through a score it can be noted (Table 4.4) that the issues discussed more frequently with the partner is the personal hygiene (61.2% of the respondents discuss it always), followed by prevention of STI (53.7% of the respondents discuss it always), whole the issue that is less frequently discussed in using condom (only 6% of the respondents discuss it always and 23.9% never). With regards to parental monitoring, the most frequent answer is sometimes for all the questions except the use of computer and Internet (where the most frequent answer is never for 47.4% of the respondent). This explains the average score of this variable (see Table 4.4). Regarding parental communication, the highest frequency for all the

questions is Never, and this explains why the average score is very low (see Table 4.4). Friend influence had been measured with three questions with different scales and the most frequent answers are Sometimes for the question “Have you talked to your close friends about preventing STDs” In between fro the question “Most of my close friends are sexually active”, and Disagree for the question “I'm sexually active because my close friends have sex and I want to be like them”.

Table 4.4 Frequencies of answers to Likert scale meso-level variables

Variable	Frequency				
Partner communication (n=67)	Never	Sometimes	Usually	Always	
How many times do you discuss with your partner using condom?	23.9	43.3	26.9	6.0	
How many times do you discuss with your partner personal hygiene?	13.4	10.4	14.9	61.2	
How many times do you discuss with your partner preventing STI?	16.4	13.4	16.4	53.7	
How many times do you discuss with your partner preventing pregnancy?	17.9	16.4	16.4	49.3	
Parental monitoring (n=97)	Never	Sometimes	Usually	Always	
My parents know with which people I go out	17.5	44.3	12.4	25.8	
When I go out and late my parents know where I am	13.4	44.3	16.5	25.8	
I talk to my parents about the plans that I have with my friends	15.5	38.1	16.5	29.9	
When I go out at night my parents know where I am	15.5	41.2	19.6	23.7	
My parents know and get used to my friends	17.5	47.4	20.6	14.4	
My parents know my friends' parents	18.6	58.8	12.4	10.3	
My parents know which TV program I watch	17.5	43.3	16.5	22.7	
My parents control and know what I do with the computer and internet	47.4	29.9	12.4	10.3	
Parental communication (n=97)	Never	Sometimes	Usually	Always	
My parents and I have talked about what is right and wrong in sexual behavior	66.0	24.7	5.2	4.1	
You talked to your parents about delaying sexual activity	75.3	14.4	7.2	3.1	
You talked to your parents about birth control	69.1	21.6	6.2	3.1	
You talked to your parents about preventing STDs	72.2	20.6	5.2	2.1	
Friend Influence (n=97)	Never	Sometimes	Usually	Always	
Have you talked to your close friends about preventing STDs	21.6	41.2	17.5	19.6	
	True	More true than false	In between	More false than true	False
Most of my close friends are sexually active	19.6	12.4	33.0	19.6	15.5
	Strongly agree	Agree	Disagree	Strongly disagree	
I'm sexually active because my close friends have sex and I want to be like them	7.2	10.3	56.7	25.8	

The analysis of the data classified into low and high level of risky sexual behavior (table 8) shows that the average age is higher for the group with a high level compared to the low level and the difference is statistically significant (p-value<0.001). Other variables that are statistically significant within the two groups are: attending school (p-value <0.001), occupational status (p-value < 0.05), and living with both parents (p-value 0.049). Instant messaging also differs in the groups (p-value 0.001). The other variables (gender, having a source of income, and drinking alcohol) do not differ significantly between the two groups.

Turning the attention to the scores (Table 9), the two groups differ statistically significant for parental monitoring (p-value 0.007). Communication with partner score is the same between the two groups as the difference of the average score is not statistically significant (p-value 0.067). Also not statistically significant is the difference in the score of the communication with parents. (p-value 0.328) and the difference in the score related to friend influence (p-value 0.328).

The Chi square analysis of the independent variables (classified as either high or low) and the dependent variables (Tables 4.5 and 4.6) shows that age, attending school, having a job, parental monitoring, living with both parents and instant messaging are statistically significant, while the other variables included in the model are not. The statistical significance is higher for age, studying and instant messaging while is slightly below 95% confidence for having a job, parental monitoring and especially for the variable living with both parents.

Table 4.5 Characteristics of demographics and lifestyles of adolescents

Variables	Level of Risky Sexual Behavior			
	Low (n= 56 (%)	High (n= 43) (%)	Chi square	p-value
Demographics				
Age (years)***			12.109	.001
15 – 17	60.7	25.6		
18 – 19	39.3	74.4		
Gender			.010	.921
Female	57.1	58.1		
Male	42.9	41.9		
Attending School***			15.672	.000
Yes	78.6	39.5		
No	21.4	60.5		
Having a job*			5.111	.024
No job	73.2	51.2		
Job (either full or part time)	26.8	48.8		
Income (Baht)			3.290	.070
No income	62.5	44.2		
Any income	37.5	55.8		
Living with both parents*				
Yes	75.0	55.8	4.029	.045
No	25.0	44.2		
Lifestyles				
Alcohol drinking before sexual intercourse			3.530	.060
No	96.4	86		
Yes	3.6	14		
Instant messaging***			11.895	.001
No	87	55.8		
Yes	13	44.2		

***: Statistical significance of the mean comparison < 0.001
*: Statistical significance of the mean comparison < 0.05

Table 4.6 Descriptive statistics and chi square analysis of score variables (meso-level)

Variables	Level of Risky Sexual Behavior			
	Low (n= 56) (%)	High (n= 43) (%)	Chi square	p-value
Partner communication	10.3 (4.1)	12.0 (2.9)	.148	.700
High	17 (36.2)	30 (63.8)		
Low	14 (51.9)	13 (48.1)		
Parental monitoring*	20.2 (5.9)	17.2 (4.7)	5.135	.023
High	20 (74.1)	7 (25.9)		
Low	34 (48.6)	36 (51.4)		
Parental communication	5.5 (2.2)	5.8 (2.8)	.626	.429
High	1 (33.3)	2 (66.7)		
Low	53 (56.4)	41 (43.6)		
Friend influence	8.3 (1.6)	8.4 (1.4)	.117	.733
Low	27 (57.4)	20 (42.6)		
High	27 (54.0)	23 (46.0)		

*: Statistical significance of the mean comparison < 0.05

A hierarchical binary logistic regression analysis, according to the theoretical model (3 blocks: micro, meso and macro-level) proposed has been carried out. The findings are in line with the Chi square but the variables statistically significant are only two: age and instant messaging (Table 4.7).

Table 4.7 Binary logistic regression

Predictive Variable	B	S.E.	Exp(B)	95% C.I.for EXP(B)	
				Lower	Upper
AGE	1.082	.545	2.952	1.015	8.587
SEX	-.500	.563	.606	.201	1.827
STU	1.085	.581	2.960	.947	9.252
JOB	-.214	.936	.807	.129	5.053
INCOME	.180	.893	1.198	.208	6.888
ALCOHOL	.684	1.025	1.981	.266	14.757
FAMILY	.780	.597	2.181	.677	7.031
PARTDISC	.221	.723	1.247	.302	5.149
PARENMON	.406	.688	1.500	.390	5.775
PAREDISC	.631	1.515	1.880	.096	36.624
FRIENINF	.442	.538	1.556	.542	4.467
INSTMSG	1.471	.677	4.353	1.154	16.421

.

AGE	Age of the respondent divided into low (15-17) and high (18-19)
SEX	Gender of the respondent (female or male)
STU	Attending school or not
JOB	Having a job or not
INCOME	Having any source of income or not
ALCOHOL	Alcohol drinking before having sexual intercourse or not
FAMILY	Living with both parents or not
PARTDISC	Partner communication (high or low)
PARENMON	Parental monitoring (high or low)
PAREDISC	Parental communication (high or low)
FRIENINF	Friend influence (low or high)
INSTMSG	Using instant message apps for either talking about sex with known partners or looking for new partners or not

4.2 Qualitative analysis

The focus groups discussion (three, two with females in Railway Community and Rim Klong Sam Saeng one with males in Rim Klong Sam Saeng community only) have been carried out by two different people (both female).

The purpose of the research has been explained by the researchers to the participants (they received an information sheet and signed a consensus form different form the one for the survey). The methodological orientation for the focus groups has been content analysis; with participants selected form the respondents to the questionnaire on voluntary basis.

In Railway community ten female joined the focus group discussion four people joined the male and two female focus group, while in Rim Klong Sam Saeng only and none of them dropped out.

The findings are reported below, following the structure of the questionnaire used to conduct the FGD.

4.2.1 Meaning of "sex"

The main findings of the focus group discussions on this issue are that both females and males think that sex is the "opposite gender", "sexual intercourse" and a "condom".

4.2.2 Meaning of "risk"

The adolescents think that risk is something associated to au undesired negative outcome, something that they do not like.

4.2.3 Meaning of "risk related to having sex"

The most recurrent theme about the risk of having sex (meant as sexual intercourse) is "having sex without prevention", where for prevention is meant either condom or pill (almost all of the participants had a good knowledge of what the emergency pill is). The main factors that lead them to have sex are lack of parental monitoring and communication and friend influence. Regarding family, the adolescent reported that "the parents have no time for taking care of them", so they need to "find friends to talk with and experience new things like smoking, and taking drugs".

Regarding drugs a recurrent theme is that “make them having sex happily together” More in general drugs make them “feel happy without any concern”. Alcohol has been mentioned as a risk factor as well. Pregnancy has been mentioned as risk factor by some females and they as they reported that some it may happen to get pregnant. Females also mentioned in one FGD that close friend who got pregnant used abortion to terminate the pregnancy. In the same focus group participants highlighted teenage pregnancy as something “normal”.

4.2.4 Attitude toward sex of close friends

The adolescents think that their close friends are already sexually active as according to the females “if a girl had menstruation then she must have had sexual intercourse”. They also think that is “trendy among adolescent to have sex” so they then to follow this trend. A theme that emerged from the discussion among females female is that there is a sort of body language that can be interpreted among the adolescents as they said “it is easy to notice (that they had already sexual experience), we can see how the adolescents flirt with the boy, how they hug each other in public”.

4.2.5 Attitude toward sex of classmates

The same applies to the classmates (both having sexual intercourse and body language to detect it). Another way to express the sexual experience is to explicitly talk about it, and this has been reported in all discussions. Females that already had sexual activity use to speak about it very openly with their friends, while female that did not have sexual activity yet tend either to avoid or not to join such kind of conversations. So talking about their own sexual activity is a way to communicate to other the willingness to engage in such activities. It also a way to gain peer popularity.

4.2.6 Environment and sex

The subjects reported that in their free time they hang around with their close friends and regarding the community where the adolescents live; there is not particular influence on their sexual behavior. What come out in all the groups (both

male and female) is that the most common place to have sex is at home of one of them when the parents are absent.

4.2.7 Instant messaging and sex

Turning the attention to instant messaging, they use it but they also pointed out the extensive use of social networks to communicate about sex with both friends and boyfriend. Regarding instant messaging applications, they are commonly used by males to look for new partners. The subjects reported that they both send sexually explicit text and images to partners.

4.2.8 Additional issues related to sex in adolescents

Another issue that emerged from the focus group discussion in that the irregular use of condoms is due to the cost of them. Even if condoms in Thailand are available free of charge at Health Centers, adolescents may feel stigmatized to go there, and tend to buy them in a convenience store. As many of the respondents either have no income of a very low one, the price of even a single condom is relevant. This also highlights the fact that the priority of always having a condom with them is not that high.

The subjects joining the FGD reported that they “would like to reduce the problems related to having sex”. They think that the support should come from the family environment as they reported: “family can help to prevent the problem of using drugs and having sex among us”. So there is a demand for support from some proximal factors, especially the family in order to tackle with an issue that is perceived as problematic and leading to undesired outcomes by the subjects.

CHAPTER V
DISCUSSION

The main objective of this study was to analyze the relationships between risky sexual behavior and a series of independent variables, classified, according to an ecological framework, into micro, meso, and macro-level. The study utilized both quantitative and qualitative tools. In this chapter comments are made first for the quantitative and then for the qualitative part. At the end the discussion focuses on the combination and comparison (triangulation) between the two methods.

5.1 Limitations

This work has some limitations. First, being a cross-sectional study does not allow measuring temporal sequence. Second, the study focuses only on some selected variables of an ecological model.

5.2Methodological concerns

The percentage of female below 18 (66.7 %) that declared not to practice any of the sexual activity foreseen by the model (question 11 of the questionnaire): may reveal a possible response bias due to the cultural values of the traditional Thai society, that consider female virginity a very important value. Contrary to that in the FGD this seems to be unrealistic. This discrepancy may be due both to the fact that they writing down is different than talking about something in a friendly environment and to the fact that virginity is still an important factor in Thai society for ladies.

Alcohol consumption was most likely underreported due to the fact that is illegal for people below the age of 20 to buy alcohol and most of the respondent did not want to disclose in a written form an illegal activity.

Only three focus groups as in one community almost no male was willing to join the focus group discussion, due also to the difficulty in gathering the adolescent

(the questionnaire were collected by the community health volunteer and picked up about one week later).

5.3 Association between independent variables and level of risky sexual behavior

5.3.1 Association between micro level variables and level of risky sexual behavior

Age (7, 8, 12) is a variable that has a statistically significant influence on the level of risk sexual behavior. This is found both in the chi square and the binary logistic regression (see Tables 4.5 and 4.7 respectively). In both cases results are statically significant. This is in line with the finding of Mmari and Sabherwal (8). Sex doesn't show any significant relations with the level of risky sexual behavior. In other words according to the present study being female or male does not affect the level of risky sexual behavior in a statically significant way (p-values are very high both in the chi square and in the binary logistic regression). Attending school (8) is another variable that has a relation with the level of risky sexual behavior: adolescents that go to school tend to have a lower level of risky sexual behavior. This highlights the importance for the adolescent of attending school as factor to reduce risky sexual practices. Having a job (8) has discordant outcomes according to the type of statistical analysis carried out: it is significant in the chi square but not in the binary logistic regression analysis. Possible explanation is the fact that more than 70% of the low risk and slightly more than half of the high risk respondents do not have a job, so the total number of them having a job (either full or part time) is quite low and this affect the significance of the regression analysis. Having a source of income (8) does not affect the level of risky sexual behavior. Contrary to the most findings of Mmari and Sabherwal in this study neither the chi square analysis nor the binary logistic regression have shown statistically significant values. One possible explanation is that almost half of the adolescent have no income and then this variable is often not present. This also because, contrary to most sub-Saharian Africa countries, where a

large part of late adolescent has a job, in Thailand adolescent at this age stage they tend not to work yet, like in most Western countries.

Thai traditional society is facing some challenges and changes towards a transition phase from traditional to modern. One of the effects of this process is a "dual value system" (15) that includes both modern and traditional values and norms. There is the "Coexistence of traditional and contemporary or modern cultures and value systems" (15). In other words, adolescents face a "double standard" (14). Although in Thailand, they have 12 years of formal school attending, many adolescents are withdrawing from school. In such a way they move themselves to the labor system, which open themselves to perform risk behavior.

Drinking alcohol in both analyses does not have a significant relation with the level of risky sexual behavior. This result is different from the recent literature review (7, 8, 11, 16) and also with the findings of the focus group discussions. In this case most likely a response bias may have occurred, as most of the respondents may have not disclosed in written a practice that is illegal (as alcohol consumption is legal above the age of 20 in Thailand). Focusing on Thailand Chaveepojnkamjorn and Pichainarong have found an association between alcohol consumption and a series of behavior including risky sexual behavior (11). Most of the respondents declared of not using alcohol but the almost everybody in the focus group discussion stated that alcohol is one of the fact that lead to risky sexual behavior among them. This is a finding that many studies have highlighted Alcohol emerged clearly as a risk factor in the focus group but not in the survey. Use of drugs due to the sensitivity had been intentionally not included in the survey, but the focus group discussion revealed that drugs use is a common issue and that is another factor that leads to high level of risky sexual behavior.

5.3.2 Association between meso-level variables and level of risky sexual behavior.

Also at meso-level there are discordant results between the chi square and the binary logistic regression analysis (5, 8, 10, 13, 16). According to the chi square analysis, parental monitoring and living with both parents have a significant relation with the level of risky sexual behavior but in the binary logistic regression these

variables, like all the others is not significant Importance of parental monitoring as factor reducing the level of risky sexual behavior come out from the study carried out by Tipwareerom et al. that focused on Thai early male adolescents (16). The variables that have shown no significance at all in either analysis are parental communication and friend influence. Regarding the first variable it has to be noted that the average score is extremely low (5.5 and 5.8 respectively with a range from 4 to 16, see Table 4.6) so there is almost no difference between low and high risk group and this is reflected in a very high p-value in both analysis. Parental monitoring and living with both parents have shown a significant association with the level of risky sexual behavior in the chi square analysis, but not in the binary logistic regression. (see Tables 4.5, 4.6 and 4.7 respectively). The very limited communication with parents about sex related issues in Thailand is not new and has already been highlighted by Rhucharoenpornpanich et al. as (13)“sexual communication about sensitive topics (i.e., sexual intercourse, condom and birth controls, HIV/AIDS, and sexually transmitted infections) are not common in most Thai families”. At the same time they highlighted that communication do happened and that is more likely to take place between parents and daughters and when the parents have the perceptions that adolescents already engaged in sexual activities. The above mentioned study of Tipwareerom et al. (16) highlighted the importance of parental communication too. Their study found that parental communication postpones adolescent sexual debut acing as counterbalance factor of the negative exposure that they receive from media and peers. The focus group discussion highlights that the respondents perceive lack of parental monitoring and communication, as one on the main reason that led them to be more prone to have both an early sexual initiation and a high risk of sexual behavior. Both of them are difficult to change as parental monitoring is due to the living arrangements of the parents and mainly influenced by external factor out of control of the family (working hours, working places, transport, commuting time, school hours), and parental communication is almost null due to the presence of strong cultural barriers. Sex seems to be a taboo with the parents and together with the fact that girls should be virgin till they get married seems to be a strong barrier to any adolescent parent communication. Furthermore from the present analysis emerged that sex often happens in the house when parents are absent and is made together with illegal

activities like drinking (forbidden till the age of 20) and taking drugs. Respondents tend to feel this parental absence and tend to imitate what their close friends do. This sense of loneliness and isolation push them toward alcohol and drug consumption too, as these substances make them “feel happy without any concern”. Regarding parental monitoring, what emerged in both methods is the lack of awareness of the parents about what use adolescents do with new media like Internet and instant messaging, posing great challenges for a proper parental monitoring regardless of the time and willingness of the parents to do it.

Parents still see sex as a taboo topic and tend not to talk about it at all with their sons and daughters. Buddhism strongly influences Thai culture as, since its introduction in the country, has been seen as a “way of life”. Family is a central pillar of the traditional Thai culture and spiritual values. At the present time spirituality in Thai families is challenged and put under pressure by social and economic changes, including the transition from a rural to an urban society. Therefore, these pressures are more strong and effective in urban contexts. So, societal and cultural values affect in several ways Thai family structure and norms; sex is a taboo and therefore is not easily discussed in Thai families.

In traditional Thai society and in its related norms premarital sex is unacceptable and there are, therefore, strong concerns and barriers in discussing sexuality in general in families. “Thai girls have been told since childhood to Ruk-Nuan-Sa-Nguan-Tua, meaning to take pride in being “untouched” and “sexually reserved”” (3). As a consequence the discussion of sex related issues is considered a taboo in Thai families. These barriers to communication are stronger for females as talking about sex is considered as the public disclosure of the loss of one of the most important and precious value the one of virginity. Anyhow, even if premarital sex is not in line with traditional values, it happens more and more frequently at a quite early age.

Living with both parents or not also show different results according to the type of analysis: it is significant (p-value just below 0.05) in the chi square analysis and not significant in the binary logistic regression. Also in this case as many of the respondents live with both parents the number of people not living with them is quite low and this affects the significance of the binary logistic regression. As for the

pervious variable, another possible explanation is the multicollinearity among the micro level independent variables.

Peer influence is statistically not significant in the quantitative analysis, bur emerges as a key factor in the qualitative one. This is in line with other studies (36, 37), that found significant peer influence of the level of risky sexual behavior, relating this influence either to the need for social reputation (the higher is the social reputation, the higher is the popularity and to increase their reputation adolescents engage themselves in some activities included sexual risky behaviors) (36) or to the role of peer social networks (37). Both studies highlight the complex and multiple dynamics of peer influence raising the importance of a deeper understanding of such a complex phenomenon.

5.3.3 Association between macro level variables and level of risky sexual behavior.

The only association investigated with the quantitative analysis at macro-level is the use of instant messaging applications (like WhatsApp, LINE, Badoo, We Chat). This variable showed to have a statistically significant relation with the level of risky sexual behavior both in the chi square and in the binary logistic regression (see Tables 4.5 and 4.7 respectively). This is a sign of the strong influence of the new media in general and of instant messaging and sexting in particular on the sexual world of the adolescents (39-42, 49-52).

Regression analysis even has shown less variables statistically significant compared to the Chi Square analysis and this due both to multicollinearity of variables and to the sample size relatively small (99 questionnaires).

The fact that Instant messaging is statistically significant both in the Chi square analysis and in the binary logistic regression shows a significant relation between an high level of risky sexual behavior and the use of instant messaging either to send sexually oriented messages or images or to look for new sex partners is interesting and poses new challenges to the public health approach to risky sexual behavior. The role of sexting in adolescent sexual behavior is very recent and previous studies have highlighted that “sexting is a globalized social phenomenon”(49). Production, consumption and distribution as well of sexual material using a

smartphone is a growing phenomenon, that involves millions of teenager allover the world. Being the mobile phone a key component of the social life of the adolescents. The relationships between sexting and high risk sexual behavior have been found in young adults(50). In the focus group emerged that male adolescent look for new girls using these applications sending often explicit sex messages and, sometimes, sexual related images. In the focus group apart from the instant messaging, the use of social media for sex related issue emerged and this as part of the role of Internet on the sexual world of the adolescent. This leads to a sort of standardization of risky sexual behavior all over the world and to the fact that health education may/should consider this tools in order to convey messages to the adolescent on the risk related to the sexual behavior (53).

Internet and smartphone applications are a big part of adolescent life and allow them to get information, lifestyles, and to communicate in a way that is almost invisible to any outsider including parents.

Urban setting did not emerge clearly as risk factor form the FGD. Anyway, the fact that one of the most common place where sexual intercourse takes place is the house of the parents when they are not at home (with more people using the house according to the availability, highlight that more the urban setting is the social organization (both parents working, staying outside home almost the whole day). One urban related factor may be the long time of commuting that increases the time of absence from of the parents, but this issue has not been clearly emerged and/or assessed by the present study.

5.4 Overall considerations

Using both quantitative and qualitative techniques allow to have a better picture of the adolescents sexual behavior and also to highlight the fact that for the most sensitive questions qualitative tools are preferable to the quantitative one: the fact that alcohol drinking emerged easily in a discussion while was almost always denied in the survey together with the fact that the female in the FGD stated that almost all them already had sexual intercourse. Friend influence seemed to be easier to be captured in the qualitative discussion also due to the fact that in the survey there was

one question that allowed the respondent not to take side (answer “In between” in question n. 36). These results may also highlight that for a topic like sexual related issues a qualitative approach may give a deeper understanding of such a complex phenomenon. As pointed out by Marston and King “Although quantitative research is effective at answering questions such as what percentage of young people report using a condom the first time they had sex?, it is less useful if we want to know the reasons for their behavior; nor will it give a broad description of what happened during the sexual encounter. Qualitative research helps describe, and find the reasons for, behavior and its social context.” (29). Also regarding instant messaging, the focus groups allow to discover the high influence of new media on the sexual world of late adolescents. The focus groups discussions highlighted the use of social media to communicate with partner and friend about sex related issues. The fact that both qualitative and quantitative analyses shade a light on the significance of this topic on the adolescents sexual behavior open the door for thinking about new strategies, tools and techniques in order to carry out effectively health education programs aimed at reducing the risk of sexual activities among adolescents.

CHAPTER VI
CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

In the present study the dependent variable was the level of risky sexual behavior of late (15 -19) adolescents. Independent variables, according to an ecological framework included variables at micro (age, sex, attending school, having a job, having a source of income, drinking alcohol), meso (living with both parents, parental monitoring, parental communication, partner communication, friend influence) and macro-level (urban environment and instant messaging).

Both quantitative and qualitative techniques have been used. The quantitative component consisted of a structured questionnaire aimed at investigating the relationships between the above mentioned independent variables with the dependent one. Chi square and binary logistic regression analyses were used in order to verify the association between independent variables and level of risky of sexual behavior. The significant variables of resulting from both methods are: age, attending school and instant messaging (to send sexual messages and or to date new partner). Chi square analysis also resulted to be statistically significant for having a job (micro level), living with both parents and parental monitoring (meso-level). The qualitative component of the mixed method was focus group discussions carried out in the two congested areas (three in total, two for females and one only for males as in one of the two areas it was not possible to gather male late adolescents). The main findings of the focus group are:

- Sexual activity (that may include sexual intercourse too) starts soon after adolescent become fertile. This means that often takes places in the early adolescence phase.
- Alcohol is frequently associated with sexual activity, especially sexual intercourse, and is sometimes associated with drugs use.

- Peer (close friends and/or classmates) have a strong influence of the sexual activity (and on the level of risk as well).
- Instant messaging applications are widely used to either look for new partners or talk about sex related issues with known partners.

Alcohol drinking before having sexual activity may have been most likely underreported in the survey. Another possible bias in the survey may be due to the fact that a high percentage of female aged 15 to 17 (66.7%) declared not to have had any of the sexual activities foreseen in the questionnaire. This may be due to the influence of traditional cultural values that considers female virginity a value to be preserved and/or to the fear to disclose these practices.

6.2 Recommendations

6.2.1 Recommendations for risk reduction

Promoting condom use is extremely important in order to reduce the level of risk among adolescents, as this study highlighted that the percentage of adolescents using it is quite low (see table 4.1).

Improving parental communication is extremely crucial as the present study highlighted an extremely low level of this kind of communication. The improvement should go both ways (parents-adolescents and adolescents-parents). This may be a very long process due to the fact that there are many cultural barriers. The importance of parental communication in Thailand has already been highlighted (16) and should be take into consideration in any risk reduction strategy.

As attending school is a risk reduction factor, the design of a proper in-school based sexual education program may be extremely beneficial.

New media (including instant messaging should be considered to deliver sexual health education messages to adolescents. This process already started as some mobile phones application have been developed in Thailand on adolescents reproductive health (53).

6.2.2 Recommendations for future research

New media in general and sexting in particular is a topic that clearly emerged as influencing the level of risky sexual behavior of late adolescents in Bangkok. This topic is quite new even if there is a growing literature (40, 41, 49-51). For this reason further research aimed at investigating the reason and the motivations that lead Bangkok adolescents to sexting and use of instant messaging for sex related issue is highly recommended. Based on these reasons, a qualitative approach may be the best study design to get a better understating of such a complex phenomenon.

REFERENCES

1. WHO. Guidelines on Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries. 2011.
2. Thaithae S, Thato R. Obstetric and perinatal outcomes of teenage pregnancies in Thailand. *J Pediatr Adolesc Gynecol*. 2011;24(6):342-6.
3. Siriarunat S, Lapvongwatana P, Powwattana A, Leerapan P. Development of a Model for Parent-Adolescent Daughter Communication about Sexuality. *Southeast Asian J Trop Med Public Health*. 2010;41(4):961-72.
4. Thato R, Penrose J. A brief, peer-led HIV prevention program for college students in Bangkok, Thailand. *J Pediatr Adolesc Gynecol*. 2013;26(1):58-65.
5. Chaikoolvatana C, Powwattana A, Lagmpan S, Jirapongsuwan A, Bennet T. Development of a School-based Pregnacy Prevention Model for Early Adolescent Female Thais. *Pac Rim Int J Nurs Res Thail.* 2013;17(2):131-47.
6. DiClemente R J, Salazar L F, Crosby R A. A review of STD/HIV preventive interventions for adolescents: sustaining effects using an ecological approach. *J Pediatr Psychol*. 2007;32(8):888-906.
7. Khumsaen N, Gary F A. Determinants of actual condom use among adolescents in Thailand. *J Assoc Nurses AIDS Care*. 2009;20(3):218-29.
8. Mmari K, Sabherwal S. A Review of Risk and Protective Factors for Adolescent Sexual and Reproductive Health in Developing Countries: An Update. *J Adolesc Health* 2013;3(5):562-572
9. Bronfenbrenner U. Ecological Models of Human Development. In: Peterson P, Baker E, McGaw B, editors. International Enciclopedia of Education. Vol. 3. 2 ed. Oxford: Elsevier; 1994:1643-7.
10. Chamratrithirong A, Miller B A, Byrnes H F, Rhucharoenpornpanich O, Cupp P K, Rosati M J, et al. Spirituality within the family and the prevention of

health risk behavior among adolescents in Bangkok, Thailand. *Soc Sci Med*. 2010;71(10):1855-63.

11. Chaveepojnkamjorn W, Pichainarong N. Current drinking and health-risk behaviors among male high school students in central Thailand. *BMC public health*. 2011;11(233):1-8.
12. Powwattana A, Ramasoota P. Differences of sexual behavior predictors between sexually active and nonactive female adolescents in congested communities, Bangkok Metropolis. *J Med Assoc Thai*. 2008;91(4):542-50.
13. Rhucharoenpornpanich O, Chamratrithirong A, Fongkaew W, Miller B A, Cupp P K, Rosati M J, et al. Parent-teen communication about sex in urban Thai families. *J Health Commun*. 2012;17(4):380-96.
14. Sridawruang C, Crozier K, Pfeil M. Attitudes of adolescents and parents towards premarital sex in rural Thailand: a qualitative exploration. *Sex Reprod Healthc*. 2010;1(4):181-7.
15. Vuttanont U, Greenhalgh T, Griffin M, Boynton P. “Smart boys” and “sweet girls”—sex education needs in Thai teenagers: a mixed-method study. *Lancet*. 2006;368(9552):2068-80.
16. Tipwareerom W, Powwattana A, Lapvongwatana P, Crosby R A. Effectiveness of a Model of Risky Sexual Behavior Prevention Among Adolescent Boys in Thailand. *Southeast Asian J Trop Med Public Health*. 2011;42(3):726-36.
17. Burns P A, Snow R C. The built environment & the impact of neighborhood characteristics on youth sexual risk behavior in Cape Town, South Africa. *Health Place*. 2012;18(5):1088-100.
18. VGuilamo-Ramos V, Jaccard J, Dittus P. Parental Monitoring of Adolescents: Current Perspectives for Researchers and Practitioners: New York: Columbia University Press; 2010.
19. Stanley D. What Do We Know About Social Cohesion: The Research Perspective of the Federal Government's Social Cohesion Research Network. *The Can J Sociol*. 2003;28(1):5-17.
20. Sampson RJ, Raudenbush RW, Earls F. Neighborhood Collective Efficacy - Does It Help Reduce Violence? National Institute of Justice, Washington DC; 1998.

21. Fantasia H C, Fontenot H B, Harris A L, Hurd L, Chui E. Ambiguity in Defining Adolescent Sexual Activity. *J Nurse Pract*. 2011;7(6):486-91.
22. Akers A Y, Gold M A, Bost JE, Adimora A A, Orr D P, Fortenberry J D. Variation in sexual behaviors in a cohort of adolescent females: the role of personal, perceived peer, and perceived family attitudes. *J Adolesc Health*. 2011;48(1):87-93.
23. Douglas M. Risk and Blame: London: Routledge; 1992.
24. Douglas M, Wildavsky AB. Risk and Culture: An essay on the selection of technical and environmental dangers. Berkeley: University of California Press; 1982.
25. Douglas M. Purity and Danger: London: Routledge; 1966.
26. Lock M, Scheper-Hughes N. The Mindful Body: A Prolegomenon to Future Work in Medical Anrhropology. *Med Anthropol Q*. 1987;1(1):6-41.
27. Foucault M. The Foucault Reader. New York: Pantheon Books; 1984.
28. Shoveller J A, Johnson J L. Risky groups, risky behaviour, and risky persons: Dominating discourses on youth sexual health. *Crit Public Health*. 2006;16(1):47-60.
29. Marston C, King E. Factors that shape young people's sexual behaviour: a systematic review. *Lancet*. 2006;368(9547):1581-6.
30. Hair E C, Park M J, Ling T J, Moore K A. Risky behaviors in late adolescence: co-occurrence, predictors, and consequences. *J Adolesc Health*. 2009;45(3):253-61.
31. Wu J, Witkiewitz K, McMahon R J, Dodge K A, Conduct Problems Prevention Research Group. A parallel process growth mixture model of conduct problems and substance use with risky sexual behavior. *Drug Alcohol Depend*. 2010;111(3):207-14.
32. Bell J. Why embarrassment inhibits the acquisition and use of condoms: A qualitative approach to understanding risky sexual behaviour. *J Adolesc*. 2009;32(2):379-91.
33. Sipsma H L, Ickovics J R, Lewis J B, Ethier K A, Kershaw T S. Adolescent pregnancy desire and pregnancy incidence. *Womens Health Issues*. 2011;21(2):110-6.

34. Reese B M, Haydon A A, Herring A H, Halpern C T. The association between sequences of sexual initiation and the likelihood of teenage pregnancy. *J Adolesc Health*. 2013;52(2):228-33.

35. Staras S A, Livingston M D, Maldonado-Molina M M, Komro K A. The Influence of Sexual Partner on Condom Use Among Urban Adolescents. *J Adolesc Health*. 2013;53(6):742-748

36. Prinstein M J, Choukas-Bradley S C, Helms S W, Brechwald W A, Rancourt D. High peer popularity longitudinally predicts adolescent health risk behavior, or does it?: an examination of linear and quadratic associations. *J Pediatr Psychol*. 2011;36(9):980-90.

37. Ali M M, Dwyer D S. Estimating peer effects in sexual behavior among adolescents. *J Adoles*c. 2011;34(1):183-90.

38. O'Hara R E, Gibbons F X, Li Z, Gerrard M, Sargent JD. Specificity of early movie effects on adolescent sexual behavior and alcohol use. *Soc Sci Med*. 2013;96:200-7.

39. Braun-Courville D K, Rojas M. Exposure to sexually explicit Web sites and adolescent sexual attitudes and behaviors. *J Adolesc Health*. 2009;45(2):156-62.

40. Dir A L, Cyders M A, Coskunpinar A. From the bar to the bed via mobile phone: A first test of the role of problematic alcohol use, sexting, and impulsivity-related traits in sexual hookups. *Comput Human Behav*. 2013;29(4):1664-70.

41. Delevi R, Weisskirch R S. Personality factors as predictors of sexting. *Comput Human Behav*. 2013;29(6):2589-94.

42. Temple J R, Paul J A, van den Berg P, Le VD, McElhany A, Temple BW. Teen sexting and its association with sexual behaviors. *Arch Pediatr Adolesc Med*. 2012;166(9):828-33.

43. Dake J A, Price J H, Maziarz L, Ward B. Prevalence and Correlates of Sexting Behavior in Adolescents. *Am J Sex Educ*. 2012;7(1):1-15.

44. Vlahov D, Freudenberg N, Proietti F, Ompad D, Quinn A, Nandi V, et al. Urban as a determinant of health. *J Urban Health*. 2007;84(3):16-26.

45. Freudenberg N, Klitzman S, Saegert S. Urban Health and Society. Interdiscplinary Approaches to Reseach and Practice. San Francisco: Jossey-Bass; 2009.
46. CDC. State and Local Youth Risk Behavior Survey - Standard High School Questionnaire. Atlanta: CDC, 2013.
47. Borawski E A, Ievers-Landis C E, Lovegreen L D, Trapl E S. Parental monitoring, negotiated unsupervised time, and parental trust: the role of perceived parenting practices in adolescent health risk behaviors. *J Adolesc Health*. 2003;33(2):60-70.
48. Aspy C B, Vesely S K, Oman RF, Rodine S, Marshall L, McLeroy K. Parental communication and youth sexual behaviour. *J Adolesc*. 2007;30(3):449-66.
49. Agustina J R, Gomez-Duran E L. Sexting: research criteria of a globalized social phenomenon. *Arch Sex Behav*. 2012;41(6):1325-8.
50. Benotsch E G, Snipes D J, Martin A M, Bull S S. Sexting, substance use, and sexual risk behavior in young adults. *J Adolesc Health*. 2013;52(3):307-13.
51. Brown J D, Keller S, Stern S. Sex, Sexuality, Sexting, and SexEd: Adolescents and the Media. *Prev Res*. 2009;16(4):12-6.
52. Yager A M, O'Keefe C. Adolescent Use of Social Networking to Gain Sexual Health Information. *The Journal for Nurse Practitioners*. 2012;8(4):294-8.
53. Thungkasemvathana P. Baring it all. A sex eduaction app aims to spread the seed of procreational knowledge to teenage Thais. Bangkok Post. 26 February 2014.

APPENDICES

APPENDIX A
HUMAN SUBJECTS APPROVAL DOCUMENT

Certificate of Approval
Ethical Review Committee for Human Research
Faculty of Public Health, Mahidol University

COA. No. MUPH 2014-021

Protocol Title :	RISKY SEXUAL BEHAVIOR AMONG THAI ADOLESCENT IN BANGKOK CONGESTED AREAS
Protocol No. :	191/2556
Principal Investigator :	Mr. Pasquale Finaldi
Affiliation :	Master of Public Health (International Program) Faculty of Public Health, Mahidol University
Approval Includes :	1. Project proposal 2. Information sheet 3. Informed consent form 4. Data collection form/Program or Activity plan
Date of Approval :	14 January 2014
Date of Expiration :	13 January 2015

The aforementioned project have been reviewed and approved according to the Declaration of Helsinki by Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University.

S. Nanthamongkolchai

(Assoc. Prof. Dr. Sutham Nanthamongkolchai)
Chairman of Ethical Review Committee for Human Research

(Assoc. Prof. Dr. Phitaya Charupoonphol)
Dean of Faculty of Public Health

420/1 Rajvithi Road, Bangkok, Thailand 10400
Tel. (662) 3548543-9 ext. 1127, 7404 Fax. (662) 6409854

APPENDIX B

QUESTIONNAIRES

ID: _____

1. Age ..... years
2. What is your sex? □ Male □ Female
3. Highest education? □ Elementary school □ Secondary school □ High school/College
4. Are you studying? □ Yes □ No
5. Do you have job? □ No □ Yes full time □Yes part time
6. Do you have any source of income?
□<3000 THB/month □ 3000-5999 THB/month □ 6000-8999 THB/month
□ 9000-14999 THB/month □>15000 THB/month □ No, I do not have any income
7. Do you live with your parents?
□ Both □ Mother only □ Father only □ Grandmother □ Other _____
8. Did you have a partner in the last six months? □ Yes □ No
9. If yes, how old is your partner? _____ years
10. Have you ever had any of the following sexual practice?
□ Touching genitals □Having genitals touched □ Giving oral sex □ Receiving oral sex □ Sexual intercourse □No, I never had any of those
11. During your life, with how many people have you had any of the above mentioned sexual activities?
□1 person □2 people □3 people □ 4 people □ 5 people □ 6 or more people
12. During the past 3 months, with how many people did you have any of the sexual activity mentioned above?
□ 1 person □ 2 people □ 3 people □ 4 people □ 5 people
□ 6 people or more□ I had sexual activity, but not in the past 3 months
13. How old were you when you had sexual intercourse for the first time?
□11 years old or younger □ 12 years old □ 13 years old
□ 14 years old □ 15 years old □ 16 years old □ 17 years old or older
□ I never had sexual intercourse
14. During your life, with how many people have you had sexual intercourse?
□ 1 person □ 2 people □ 3 people □ 4people □ 5 people □ 6 people or more
15. During the past 3 months, with how many people did you have sexual intercourse?
□1 person □2 people □ 3 people □ 4 people □ 5 people
□ 6 people or more □ I had sexual intercourse, but not in the past 3 months
16. Did you drink alcohol before you had sexual activity the last time?
□ Yes □ No □ I have never had sexual activity

17. The last time you had sexual intercourse, did you or your partner use a condom?
□Yes □ No □ I have never had sexual intercourse
18.The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? (Select only one response)
□ Birth control pills □ Condom □ Withdrawal □Other _____□
No method was used to prevent pregnancy □ I have never had sexual intercourse

How many times do you discuss these issues with your partner?

Issues	Never	Sometimes	Usually	Always
.19 using condom				
.20personal hygiene				
.21preventing STI				
.22preventing pregnancy				

How many times did you perform these activities with your parents?

Activities	Never	Sometimes	Usually	Always
23. My parents know with which people I go out				
24. When I go out and late my parents know where I am				
25. I talk to my parents about the plans that I have with my friends				
26. When I go out at night my parents know where I am				
27. My parents know and get used to my friends				
28. My parents know my friends' parents				
29. My parents know which TV program I watch				
30. My parents control and know what I do with the computer and internet				
.31 My parents and I have talked about what is right and wrong in sexual behavior				
.32 You talked to your parents about delaying sexual activity				
.33 You talked to your parents about birth control				
34.You talked to your parents about preventing STDs				

35. Have you talked to your close friends about preventing STDs?
□ Never □ Sometimes □Usually □ Always
36. Most of my close friends are sexually active
□ False □ More false than true□ In between □ More true than false□ True
37. I'm sexually active because my close friends have sex and I want to be like them
□ Strongly agree □ Agree □ Disagree □ Strongly disagree
38. Do you have a smartphone?
□ Yes □ No
39. Do you use instant messaging like WhatsApp, LINE, WeChat, Badoo?

□ Yes □ No

40. For which purpose do you use instant messaging?

□ Chat only (general issues, not sex) □ Talking about sex with known people

□ Looking for new sex partners □ Other _____

Focus group

1. What is the first think that comes to your mind when I say the word sex?
2. What is the first think that comes to your mind when I say the word risk?
3. What do you think are the main risks related to having sex?
4. What is the attitude of your close friends towards sex?
    a. What do you think about your close friends that have sex?
    b. Why do you think they have sex?
    c. What do you think about your close friends that do not have sex?
    d. Why do you think they do not have sex?
5. What is the attitude of your classmates towards sex?
    a. What do you think about your classmates having sex?
    b. Why do you think they have sex?
    c. What do you think about your classmates that do not have sex?
    d. Why do you think they do not have sex?
6. What do you do in your neighborhood in your free time (when you are not at school or at work)?
    a. What are the facilities available in your neighborhood?
    b. Is there any place that you use to have sex?
    c. Do you think that the area you live influence your sexual behavior? How?
7. What do you think about instant messaging apps like WhatsApp LINE, Badoo, WeChat?
    a. Do you use them?
    b. For which objective you use them?
    c. Do you think they can facilitate in having sex with your partner?
    d. Do you use them to date new people?
8. Do you have any other thoughts or view you would like to share?

เลขที่ __ __

แบบประเมินพฤติกรรมของวัยรุ่น

****

คำชี้แจง ทำเครื่องหมาย √ ใน ( ) หรือ เติมข้อความในช่องว่าง

1. อายุ ..... ปี (เต็ม)
2. เพศ ( ) 1.ชาย ( ) 2.หญิง
3. การศึกษาสูงสุด
   ( ) 1. ประถมศึกษา ( ) 2. มัธยมศึกษาตอนต้น ( ) 3. มัธยมศึกษาตอนปลาย
4. ท่านกำลังศึกษาอยู่หรือไม่
   ( ) 1. ใช่ ( ) 2. ไม่ใช่
5. ท่านมีงานทำหรือไม่
   ( ) 1. ไม่มี ( ) 2. มีเป็นงานเต็มเวลา ( ) 3. มีเป็นงานไม่เต็มเวลา
6. ท่านมีรายได้ต่อเดือนเท่าไร
   ( ) 1. < 3,000 บาท ( ) 2. 3,000-5,999 บาท ( ) 3. 6,000-8,999 บาท
   ( ) 4. 9,000-14,999 บาท ( ) 5. >15,000 บาท ( ) 6. ไม่มีรายได้
7. บุคคลที่ท่านพักอาศัยในปัจจุบัน
   ( ) 1. พักอาศัยกับพ่อแม่พี่/น้อง ( ) 2. พักอาศัยกับพ่อหรือแม่
   ( ) 3. พักอาศัยกับญาติ ( ) 4. พักอาศัยเฉพาะกับพี่/น้อง
   ( ) 5. อื่นๆระบุ .....
8. ระยะ 6 เดือนที่ผ่านมาท่านมีแฟนหรือไม่
   ( ) 1.มี ( ) 2.ไม่มี
9. ถ้ามี แฟนของท่านอายุ..... ปี (เต็ม)
10. ท่านมีประสบการณ์ในกิจกรรมเหล่านี้หรือไม่ (ตอบได้มากกว่า 1 ข้อ)
    ( ) 1.สัมผัสอวัยวะเพศ ( ) 2.ถูกสัมผัสอวัยวะเพศ ( ) 3.กระทำ oral sex
    ( ) 4.ถูกกระทำ oral sex ( ) 5.มีเพศสัมพันธ์ทางช่องคลอด ( ) 6.ไม่เคยมีกิจกรรมดังกล่าว
11. ท่านมีกิจกรรมดังกล่าวข้างต้นกับกี่คน
    ( ) 1. 1 คน ( ) 2. 2 คน ( ) 3. 3 คน ( ) 4. 4 คน
    ( ) 5. 5 คน ( ) 6. มากกว่า 6 คน
12. ในช่วง 3 เดือนที่ผ่านมา ท่านมีกิจกรรมดังกล่าวข้างต้นกับกี่คน
    ( ) 1. 1 คน ( ) 2.2 คน ( ) 3.3 คน ( ) 4. 4 คน
    ( ) 5. 5 คน ( ) 6.มากกว่า 6 คน ( ) 7. เคยมี แต่ไม่ใช่ช่วง 3 เดือนที่ผ่านมา

13. ท่านมีเพศสัมพันธ์ครั้งแรกเมื่ออายุเท่าไร

( ) 1. ≤11 ปี ( ) 2. 12 ปี ( ) 3. 13 ปี ( ) 4. 14 ปี

( ) 5. 15 ปี ( ) 6. 16 ปี ( ) 7. 17 ปี หรือ มากกว่า

( ) 8. ไม่เคยมีเพศสัมพันธ์

14. ท่านมีคู่นอนกี่คน

( ) 1. 1 คน ( ) 2.2 คน ( ) 3.3 คน ( ) 4. 4 คน

( ) 5. 5 คน ( ) 6. 6 คนหรือมากกว่า

15. ในช่วง 3 เดือนที่ผ่านมาท่านมีคู่นอนกี่คน

( ) 1. 1 คน ( ) 2.2 คน ( ) 3.3 คน ( ) 4. 4 คน

( ) 5. 5 คน ( ) 6. 6 คนหรือมากกว่า( ) 7. มีเพศสัมพันธ์ แต่ไม่ใช่ในช่วง 3 เดือนที่ผ่านมา

16. ท่านดื่มแอลกอฮอล์จนไม่รู้สึกตัวก่อนมีเพศสัมพันธ์ครั้งล่าสุด

( ) 1. ใช่ ( ) 2. ไม่ใช่ ( ) 3. ไม่เคยมีเพศสัมพันธ์

17. ท่านใช้ถุงยางอนามัยในการมีเพศสัมพันธ์ครั้งล่าสุด

( ) 1. ใช่ ( ) 2. ไม่ใช่ ( ) 3. ไม่เคยมีเพศสัมพันธ์

18. ท่านใช้การคุมกำเนิดวิธีใดในการมีเพศสัมพันธ์ครั้งล่าสุด

( ) 1. ยาเม็ดคุมกำเนิด ( ) 2. ถุงยางอนามัย ( ) 3. หลั่งภายนอก ( ) 4. อื่นๆระบุ.....

( ) 5. ไม่ได้ใช้ ( ) 6. ไม่เคยมีเพศสัมพันธ์

ท่านพูดคุยกับแฟน/คู่นอนของท่านในเรื่องต่อไปนี้บ่อยครั้งเพียงใด

ท่านพูดคุยกับแฟน/คู่นอนของท่าน	ไม่เคยเลย	บางครั้ง	บ่อยครั้ง	เป็นประจำ
19.การใช้ถุงยางอนามัยขณะมีเพศสัมพันธ์				
20. การรักษาความสะอาดของอวัยวะสืบพันธุ์				
21. การป้องกันการติดเชื้อโรคติดต่อทางเพศสัมพันธุ์				
22. การป้องกันการตั้งครรภ์				

ท่านปฏิบัติกับพ่อแม่/ผู้ปกครองของท่านในประเด็นดังกล่าวนี้บ่อยครั้งเพียงใด

กิจกรรม	ไม่เคยเลย	บางครั้ง	บ่อยครั้ง	เป็นประจำ
23.ท่านบอกให้ผู้ปกครองทราบว่าท่านไปไหน				
24.เมื่อกลับบ้านช้า/ผิดเวลาท่านจะแจ้งให้ผู้ปกครองทราบ				
25.ท่านแจ้งให้ผู้ปกครองทราบก่อนออกจากบ้านว่าท่านไปที่ไหนกับใคร				
26.ท่านขออนุญาตผู้ปกครองเมื่อต้องออกจากบ้านในเวลากลางคืน				

กิจกรรม	ไม่เคยเลย	บางครั้ง	บ่อยครั้ง	เป็นประจำ
27.ผู้ปกครองของท่านรู้จักและคุ้นเคยกับกลุ่มเพื่อนของท่าน				
28.ผู้ปกครองของท่านรู้จักกับผู้ปกครองกลุ่มเพื่อนของท่าน				
29.ผู้ปกครองของท่านรู้ว่าท่านดูโทรทัศน์รายการใด				
30.ผู้ปกครองของท่านมีการควบคุมการใช้คอมพิวเตอร์และใช้อินเตอร์เน็ต				
31.ท่านพูดคุยเกี่ยวกับความเหมาะสมของการมีเพศสัมพันธ์กับผู้ปกครอง				
32.ท่านพูดคุยเกี่ยวกับการยืดเวลาในการมีเพศสัมพันธ์กับผู้ปกครอง				
33.ท่านพูดคุยเกี่ยวกับวิธีคุมกำเนิดกับผู้ปกครอง				
34.ท่านพูดคุยเกี่ยวกับการป้องกันการติดเชื้อโรคติดต่อทางเพศสัมพันธ์กับผู้ปกครอง				

35. ท่านพูดคุยกับเพื่อนสนิทของท่านเกี่ยวกับการมีเพศสัมพันธ์บ่อยครั้งเพียงใด

( ) 1. ไม่เคยเลย ( ) 2. บางครั้ง ( ) 3. บ่อยครั้ง ( ) 4. เป็นประจำ

36. เพื่อนสนิทส่วนใหญ่ของท่านเคยมีเพศสัมพันธ์

( ) 1. ไม่ใช่ ( ) 2. ไม่มีประสบการณ์มากกว่ามี ( ) 3. น่าจะมีจำนวนเท่าๆกัน

( ) 4. มีประสบการณ์มากกว่าไม่มี ( ) 5. ใช่

37. ท่านมีเพศสัมพันธ์เพราะเพื่อนสนิทของท่านมีเพศสัมพันธ์ จึงทำให้ท่านอยากเป็นเหมือนเพื่อนสนิท

( ) 1. เห็นด้วยอย่างยิ่ง ( ) 2. เห็นด้วย ( ) 3. ไม่เห็นด้วย ( ) 4. ไม่เห็นด้วยอย่างยิ่ง

38. ท่านมีโทรศัพท์มือถือหรือไม่

( ) 1. มี ( ) 2. ไม่มี

39. ท่านใช้โทรศัพท์มือถือในการส่งข้อความ/รูปภาพ/คลิป ใน WhatsApp, LINE, WeChat, Badooหรือไม่

( ) 1. ใช้ ( ) 2. ไม่ใช้

40. ท่านมีจุดประสงค์ใดในการส่งข้อความ/รูปภาพ/คลิป ใน WhatsApp, LINE, WeChat, Badoo

( ) 1. โต้ตอบข้อความทั่วไป ( ) 2. โต้ตอบเรื่องเพศกับคนที่รู้จัก ( ) 3. หาแฟน/คู่นอน

( ) 4. อื่นๆระบุ.....

****

version 10 January 2014

Ethical Review Committee
Faculty of Public Health, Mahidol University
COA. No. MUPH 2014 - 021
Date of Approval 14 Jan 2014

แนวคำถามสำหรับสนทนากลุ่ม

1. อะไรเป็นสิ่งแรกที่ท่านนึกถึงเมื่อได้ยินคำว่า “เรื่องเพศ”
2. อะไรเป็นสิ่งแรกที่ท่านนึกถึงเมื่อได้ยินคำว่า “ความเสี่ยงทางเพศ”
3. อะไรเป็นปัจจัยเสี่ยงที่เกี่ยวข้องกับเรื่องเพศในวัยรุ่น
4. เพื่อนสนิทของท่านมีความรู้สึกเกี่ยวกับเรื่องเพศอย่างไร
    - 4.1 ท่านคิดว่าเพื่อนสนิทของท่านมีเพศสัมพันธ์หรือไม่
    - 4.2 ทำไมท่านถึงคิดว่าเพื่อนสนิทเคยมีเพศสัมพันธ์
    - 4.3 ท่านคิดถึงเพื่อนสนิทที่ไม่เคยมีประสบการณ์ทางเพศอย่างไร
    - 4.4 ทำไมท่านถึงคิดว่าเพื่อนสนิทไม่เคยมีเพศสัมพันธ์
5. เพื่อนร่วมห้องเรียนของท่านมีความรู้สึกเกี่ยวกับเรื่องเพศอย่างไร
    - 5.1 ท่านคิดว่าเพื่อนร่วมห้องเรียนของท่านมีเพศสัมพันธ์หรือไม่
    - 5.2 ทำไมท่านถึงคิดว่าเพื่อนร่วมห้องเรียนเคยมีเพศสัมพันธ์
    - 5.3 ท่านคิดถึงเพื่อนร่วมห้องเรียนที่ไม่เคยมีประสบการณ์ทางเพศอย่างไร
    - 5.4 ทำไมท่านถึงคิดว่าเพื่อนร่วมห้องเรียนไม่เคยมีเพศสัมพันธ์
6. ท่านใช้เวลาว่างหลังจากเลิกเรียน/ทำงานทำกิจกรรมต่างๆในชุมชนของท่านอย่างไร
    - 6.1 ชุมชนของท่านมีอุปกรณ์ต่างๆให้ใช้เพื่อผ่อนคลายหรือไม่
    - 6.2 ชุมชนของท่านมีพื้นที่ล่อแหลมที่ทำให้มีเพศสัมพันธ์หรือไม่ อย่างไร
    - 6.3 ท่านคิดว่าสภาพแวดล้อมของชุมชนมีอิทธิพลทำให้ท่านมีเพศสัมพันธ์หรือไม่ อย่างไร
7. ท่านมีความคิดเห็นอย่างไรเกี่ยวกับ WhatsApp, LINE, Badoo, WeChat
    - 7.1 ท่านใช้WhatsApp, LINE, Badoo, WeChat หรือไม่
    - 7.2 ถ้าใช้ เพื่อวัตถุประสงค์อะไร
    - 7.3ท่านคิดว่าเครื่องมือสื่อสารเหล่านี้เป็นสาเหตุของการมีเพศสัมพันธ์หรือไม่
    - 7.4 ท่านได้ใช้เครื่องมือสื่อสารเหล่านี้ในการหาแฟน/คู่เดท หรือไม่ อย่างไร
8. ท่านมีความเห็นอื่นๆที่เกี่ยวกับเรื่องเพศของวัยรุ่นในปัจจุบันหรือไม่ อย่างไร

Version 10 January 2014

APPENDIX C
INFORMATION SHEETS

EC-3 Form

C.1. Quantitative survey

Information Sheet

1.Title of project:
Risky sexual behavior among Thai adolescent in Bangkok congested areas

2.Study site:
TukDaeng (Bang Sue District), Highway Department (Rajvithi District), Bangkok

3.This project is conducted by Pasquale Finaldi
under supervision of Major Advisor as follows:
Associate Professor Dr. ArpapornPowwattana – Department of Public Health Nursing

4.Brief Background, Rationale: (use simple word, understandable by volunteer participant)
Risky sexual behavior happens often among adolescent and may lead to several undesired outcomes like Sexually Transmitted Diseases, HIV and pregnancy. The study aims at understanding some of the factors that may lead to risky sexual behavior. These factors are not related to the individual, but also to the family, the peers, the partner, the media, the neighborhood. The study a broad approach in order to have a better understanding of this complex phenomenon.
Another trend related to risky sexual behavior in Thailand is that adolescent pregnancy is also growing: the figure has gone up from 13.9 in 2004 to 16.5 per 100 live births in 2011. According to WHO every year around 16 million of late adolescent give birth every year and that most of them are unwanted or unplanned and happened in developing or low-middle income countries. This issue is quite complex and is made by several aspects and the term risk and sex behavior are not univocal. Having said that, an analysis and understanding of the several factors and the relations among them is needed.

5.Objectives:
To assess the behaviors and factors related to sexual activity that put adolescent at risk of negative health outcomes

6.You are invited to be a volunteer/subject to participate in the project:
As your age is between 15 and 19, therefore you can provide the information needed in order to carry out this study.

7. Research activities which involving you when you volunteer to participate in this research project will be as following: (focus on the parts that involve volunteers/subjects)
You will be asked to fill in a questionnaire answering to some question related to sexual behavior, like age, sex, types of sexual activity if any, partner, and family.

8.Period of time that you will be involved in this research activities (Treatment/data collection):
20 to 30 minutes

9.Expected benefits of the project to you and to others:
The project will allow to gain a better understanding of the determinants of risky sexual behavior that may be beneficial to all the adolescent and the community as well. The subjects participating will benefit as the better understanding will increase their awareness and decision making as well.

10.Risks or any undesirable that may occur to you caused by this research and measure or prevention and risk reclusion method which will be provided during participation in the project.
Due to the topic emotional consequences may be experienced by the participants. For this reason the questionnaires will be administered by trained interviewers (Thai student of Master of Public Health Mahidol University) and participants can withdraw for the study at any time. Phone number of the counseling department of the nearest health facility will also be provided.

11.How can you securely store the data and keep them confidential? (such as how
to take care data, where are data storage who will access, and how to destroy data and when)
Data will be collected in an anonymous way. No name will be recorded. Data will be kept for the time needed to analysis and destroyed after that. Regarding the publication, we will not specify the individual, but present all information as a whole.

12.The right of the subject (he/she) to withdraw from the project.
You have the full unconditional right to withdraw from the study at any time you want. When you start answering the questions, and you feel uncomfortable, you can choose not to answer or withdraw from the study.

13.Contact address of authorized persons in case of emergency.
Mr. Pasquale Finaldi - Baan Siri Sukhumvit Soi 10, 16 Sukhumvit Road, Soi Sukhumvit 10, Klongtoei, Bangkok 10110 – 085 9088536.

Dr. Arpaporn Powwattana - 420/1 Rajvithi Road, Bangkok – 02 3548540.

This research project be approved by the Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University. Office address at Building 1, 4th Floor, 420/1 Rajvithi Road, Rajthevi, Bangkok 10400, Telephone: 0-2354-8543-9 Ext. 1127, 7404 Fax: 0-2640-9854.

เอกสาร จธ.3

เอกสารชี้แจงการวิจัยแก่ผู้ยินยอมตนให้ทำการวิจัย

1.ชื่อโครงการวิจัย พฤติกรรมเสี่ยงทางเพศของวัยรุ่นในชุมชนแออัด

2.สถานที่ที่ทำการวิจัย ชุมชนตึกแดง (เขตบางซื่อ) และ ชุมชนกรมทางหลวง (เขตพญาไท) กรุงเทพฯ

3.หัวหน้าโครงการและผู้ร่วมโครงการ และที่อยู่ที่ติดต่อได้

Pasquale Finaldi นักศึกษาหลักสูตรสาธารณสุขศาสตรมหาบัณฑิต คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล ภายใต้การดูแลของ รองศาสตราจารย์อาภาพร เผ่าวัฒนา 420/1 ถนนราชวิถี (ภาควิชาการพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล) กรุงเทพมหานคร รหัสไปรษณีย์ 10400

4.บทนำและเหตุผลในการศึกษา

โรคติดต่อทางเพศสัมพันธ์ โดยเฉพาะโรคเอดส์แพร่ระบาดในประเทศไทย และพบว่ามีแนวโน้มเพิ่มขึ้นเรื่อยๆ โดยเฉพาะในกลุ่มวัยรุ่นเป็นกลุ่มที่มีการเพิ่มอย่างรวดเร็วของจำนวนของผู้ป่วยโรคเอดส์และผู้ติดเชื้อเอดส์ที่มีอาการ การเพิ่มจำนวนของผู้ติดเชื้อโรคติดต่อทางเพศสัมพันธ์มีความสัมพันธ์กับการเพิ่มขึ้นของการมีเพศสัมพันธ์อย่างไม่ปลอดภัย ผลกระทบคือ การตั้งครรภ์วัยรุ่นเพิ่มขึ้นจาก 13.9 ต่อ 100 คน ในปี พ.ศ.2547 เป็น 16.5 ต่อ 100 คน ในปี พ.ศ.2554 ซึ่งสอดคล้องกับองค์การอนามัยโลกที่เปิดเผยว่าทุกปีมีวัยรุ่นตอนปลาย 16 ล้านคน ตั้งครรภ์แบบไม่ได้ตั้งใจ ส่วนใหญ่เกิดในประเทศที่กำลังพัฒนาและ ประเทศที่ยากจน สาเหตุของปัญหานี้มีความซับซ้อน ซึ่งอาจมีสาเหตุมาจากการรับรู้เกี่ยวกับความเสี่ยง และ พฤติกรรมทางเพศที่ไม่เหมาะสม ดังนั้นการศึกษานี้จึงมีวัตถุประสงค์เพื่อศึกษาปัจจัยต่างๆที่มีความสัมพันธ์กับพฤติกรรมเสี่ยงทางเพศทั้งปัจจัยในระดับบุคคล ครอบครัว เพื่อน แฟน สื่อต่างๆ และ สภาพแวดล้อมที่เป็นบริบททางสังคม

5.วัตถุประสงค์

วัตถุประสงค์ในการศึกษาเพื่ออธิบายพฤติกรรมเสี่ยงทางเพศของวัยรุ่นและปัจจัยที่เกี่ยวข้องที่นำไปสู่ผลกระทบด้านลบต่อสุขภาพ

6.เหตุผลที่เชิญชวนให้ท่านเข้าร่วมโครงการวิจัยนี้

ท่านถือเป็นผู้ที่มีความสำคัญต่อการป้องกันพฤติกรรมเสี่ยงทางเพศ เนื่องจากการให้ข้อมูลต่างๆ เกี่ยวกับพฤติกรรมของวัยรุ่นจะเป็นฐานข้อมูลสำคัญ เพื่อเป็นประโยชน์ต่อการพัฒนาโปรแกรมในการป้องกันพฤติกรรมเสี่ยงทางเพศต่อไป

7.วิธีการวิจัย

เมื่อท่านสมัครใจเข้าร่วมโครงการวิจัย ท่านจะได้ตอบแบบสอบถามตามลำดับ ดังนี้ ข้อมูลส่วนบุคคล สัมพันธภาพกับเพื่อนและพ่อแม่/ผู้ปกครอง และ พฤติกรรมทางเพศ

8.ระยะเวลาที่ต้องทำการทดสอบในผู้ยินยอมตนให้ทำการวิจัย

การตอบแบบสอบถามใช้เวลาทั้งหมดประมาณ 20-30 นาที

9.ประโยชน์ที่คาดว่าจะเกิดขึ้นทั้งต่อผู้ยินยอมตนให้ทำการวิจัยและต่อผู้อื่น

การเข้าร่วมในงานวิจัยนี้จะช่วยให้ท่านเข้าใจถึงปัจจัยที่เกี่ยวข้องกับพฤติกรรมเสี่ยงทางเพศ และข้อมูลที่ได้จะใช้เป็นแนวทางในการพัฒนากิจกรรมเพื่อป้องกันพฤติกรรมเสี่ยงทางเพศของวัยรุ่นในชุมชน

Version 10 January 2014

Ethical Review Committee
Faculty of Public Health, Mahidol University
COA. No. MUPH 2014-021
Date of Approval 14 Jan 2014

10.ความเสี่ยง หรือ ความไม่สบายใดที่คาดว่าจะเกิดขึ้นกับผู้ยินยอมตนให้ทำการวิจัยในระหว่างการเข้าร่วมการศึกษาวิจัย

ไม่มีข้อเสียต่อตัวท่านในการเข้าร่วมในงานวิจัยนี้ อย่างไรก็ตามท่านอาจมีความรู้สึกไม่สบายใจจากการนึกคิดเกี่ยวกับตัวเอง เพราะบางข้อคำถามหรือกิจกรรมบางอย่างอาจตรงไปตรงมา ถ้าท่านรู้สึกอึดอัด ไม่สบายใจ วิตกกังวล ท่านสามารถเลือกที่จะไม่ให้ข้อมูลหรือไม่เข้าร่วมกิจกรรมในเรื่องนั้นๆ หรือ ยุติการตอบได้โดยไม่มีผลกระทบใดๆ

11.การดูแลรักษาความลับของข้อมูลต่างๆ ของผู้ยินยอมตนให้ทำการวิจัย

ไม่มีการเปิดเผยว่าผู้ใดให้ข้อมูลและตอบแบบสอบถามในการวิจัยนี้ ไม่สามารถเชื่อมโยงตัวท่านกับข้อมูลและข้อคำตอบในแบบสอบถาม ข้อมูลและแบบสอบถามจะถูกเก็บในที่ที่ปลอดภัย รหัสจะถูกใช้เพื่อแยกแยะข้อมูลและแบบสอบถาม ผู้วิจัยจะเป็นเพียงผู้เดียวที่ดำเนินการเกี่ยวกับการใส่รหัส หลังจากที่ข้อมูลได้ถูกใส่รหัสและเก็บรักษาในคอมพิวเตอร์ไฟล์ สมุดบันทึกและแบบสอบถามจะถูกทำลายทันที การนำเสนอข้อมูลในงานวิจัย เราจะไม่นำเสนอข้อมูลที่บอกได้ว่าข้อมูลนั้นมาจากตัวท่านหรือสถานที่ของชุมชนที่ท่านพักอาศัย

12.สิทธิผู้ยินยอมตนให้ทำการวิจัยจะถอนตัวออกจากโครงการวิจัยได้ทุกเมื่อ

การตัดสินใจของท่านไม่มีผลกระทบต่อความสัมพันธ์ของท่านที่มีต่อทางชุมชนทั้งในปัจจุบันและในอนาคต ถ้าท่านเริ่มให้ข้อมูลและตอบแบบสอบถามและรู้สึกว่าท่านไม่ต้องการที่จะตอบข้อคำถามต่อไป ท่านสามารถหยุดได้ทุกเวลา ท่านสามารถเลือกที่จะไม่ตอบข้อคำถามที่ทำให้รู้สึกไม่สะดวกใจ

13.ผู้รับผิดชอบที่ผู้ยินยอมตนให้ทำการวิจัยสามารถติดต่อได้โดยสะดวก กรณีมีเหตุจำเป็น หรือฉุกเฉิน

ผู้รับผิดชอบในงานวิจัยนี้คือ Pasquale Finaldi และ รองศาสตราจารย์อาภาพร เผ่าวัฒนา

ท่านอาจจะถามคำถามที่ท่านสงสัยเพิ่มเติมนี้ หรือต่อไปถ้าท่านมีข้อคำถาม ท่านสามารถติดต่อ รองศาสตราจารย์อาภาพร เผ่าวัฒนา ได้ที่

ที่อยู่ (ในเวลาราชการ) ภาควิชาการพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล

โทรศัพท์ (02) 354-8542

ที่อยู่ (นอกเวลาราชการ) 77/60 ถนนลาดพร้าว ซอย 3 แขวงลาดยาว เขตจตุจักร กรุงเทพฯ โทรศัพท์ (02) 938-5739

ท่านสามารถเก็บแบบฟอร์มนี้เพื่อไว้เป็นหลักฐาน

Version 10 January 2014

Ethical Review Committee
Faculty of Public Health, Mahidol University
COA. No. MUPH 2014-021
Date of Approval 14 Jan 2014

Focus Group Discussion **EC-3 Form**

Information Sheet

1.Title of project:
Risky sexual behavior among Thai adolescent in Bangkok congested areas

2.Study site:
Tuk Daeng (Bang Sue District), Highway Department (Rajvithi District), Bangkok
……
…

3.This project is conducted by Pasquale Finaldi
under supervision of Major Advisor as follows:
Associate Professor Dr. Arpaporn Powwattana – Department of Public Health Nursing

4.Brief Background, Rationale: (use simple word, understandable by volunteer participant)
Risky sexual behavior happens often among adolescent and may lead to several undesired outcomes like Sexually Transmitted Diseases, HIV and pregnancy. The study aims at understanding some of the factors that may lead to risky sexual behavior. These factors are not related to the individual, but also to the family, the peers, the partner, the media, the neighborhood. The study a broad approach in order to have a better understanding of this complex phenomenon.
Another trend related to risky sexual behavior in Thailand is that adolescent pregnancy is also growing: the figure has gone up from 13.9 in 2004 to 16.5 per 100 live births in 2011. According to WHO every year around 16 million of late adolescent give birth every year and that most of them are unwanted or unplanned and happened in developing or low-middle income countries. This issue is quite complex and is made by several aspects and the term risk and sex behavior are not univocal. Having said that, an analysis and understanding of the several factors and the relations among them is needed

5.Objectives:
To assess the behaviors and factors related to sexual activity that put adolescent at risk of negative health outcomes

6.You are invited to be a volunteer/subject to participate in the project:
As your age is between 15 and 19, therefore you can provide the information needed in order to carry out this study.

7. Research activities which involving you when you volunteer to participate in this research project will be as following: (focus on the parts that involve volunteers/subjects)
You will be asked to join a focus group answering some question related to sexual behavior, like peer, media and neighborhood influence on your sexual behavior.

8.Period of time that you will be involved in this research activities (Treatment/data collection):
40 to 45minutes

9.Expected benefits of the project to you and to others:
The project will allow to gain a better understanding of the determinants of risky sexual behavior that may be beneficial to all the adolescent and the community as well.
The subjects participating will benefit as they will discuss among themselves and share experiences and points of view about the topic.

10.Risks or any undesirable that may occur to you caused by this research and measure or prevention and risk reclusion method which will be provided during participation in the project.
Due to the topic emotional consequences may be experienced by the participants. For this reason the questionnaires will be administered by trained interviewers (Thai student of Master of Public Health Mahidol University) and participants can withdraw for the study at any time. Phone number of the counseling department of the nearest health facility will also be provided.

11.How can you securely store the data and keep them confidential? (such as how
to take care data, where are data storage who will access, and how to destroy data and when)
Data will be collected in an anonymous way. No name will be recorded. Data will be kept for the time needed to analysis and destroyed after that. Regarding the publication, we will not specify the individual, but present all information as a whole.

12.The right of the subject (he/she) to withdraw from the project.
You have the full unconditional right to withdraw from the study at any time you want. When you start answering the questions, and you feel uncomfortable, you can choose not to answer or withdraw from the study.

13.Contact address of authorized persons in case of emergency.
Mr. Pasquale Finaldi - Baan Siri Sukhumvit Soi 10, 16 Sukhumvit Road, Soi Sukhumvit 10, Klongtoei, Bangkok 10110 – 085 9088536.

Dr. Arpaporn Powwattana - 420/1 Rajvithi Road, Bangkok – 02 3548540.

This research project be approved by the Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University. Office address at Building 1, 4th Floor, 420/1 Rajvithi Road, Rajthevi, Bangkok 10400, Telephone: 0-2354-8543-9 Ext. 1127, 7404 Fax: 0-2640-9854.

เอกสาร จธ.3

เอกสารชี้แจงการวิจัยแก่ผู้ยินยอมตนให้ทำการวิจัย
(การสนทนากลุ่ม)

1.ชื่อโครงการวิจัย พฤติกรรมเสี่ยงทางเพศของวัยรุ่นในชุมชนแออัด

2.สถานที่ที่ทำการวิจัย ชุมชนตึกแดง (เขตบางซื่อ) และ ชุมชนกรมทางหลวง (เขตพญาไท) กรุงเทพฯ

3.หัวหน้าโครงการและผู้ร่วมโครงการ และที่อยู่ที่ติดต่อได้

Pasquale Finaldi นักศึกษาหลักสูตรสาธารณสุขศาสตรมหาบัณฑิต คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล ภายใต้การดูแลของ รองศาสตราจารย์อาภาพร เผ่าวัฒนา 420/1 ถนนราชวิถี (ภาควิชาการพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล) กรุงเทพมหานคร รหัสไปรษณีย์ 10400

4.บทนำและเหตุผลในการศึกษา

โรคติดต่อทางเพศสัมพันธ์ โดยเฉพาะโรคเอดส์แพร่ระบาดในประเทศไทย และพบว่ามีแนวโน้มเพิ่มขึ้นเรื่อยๆ โดยเฉพาะในกลุ่มวัยรุ่นเป็นกลุ่มที่มีการเพิ่มอย่างรวดเร็วของจำนวนของผู้ป่วยโรคเอดส์และผู้ติดเชื้อเอดส์ที่มีอาการ การเพิ่มจำนวนของผู้ติดเชื้อโรคติดต่อทางเพศสัมพันธ์มีความสัมพันธ์กับการเพิ่มขึ้นของการมีเพศสัมพันธ์อย่างไม่ปลอดภัย ผลกระทบคือ การตั้งครรภ์วัยรุ่นเพิ่มขึ้นจาก 13.9 ต่อ 100 คน ในปี พ.ศ.2547 เป็น 16.5 ต่อ 100 คน ในปี พ.ศ.2554 ซึ่งสอดคล้องกับองค์การอนามัยโลกที่เปิดเผยว่าทุกปีมีวัยรุ่นตอนปลาย 16 ล้านคน ตั้งครรภ์แบบไม่ได้ตั้งใจ ส่วนใหญ่เกิดในประเทศที่กำลังพัฒนาและ ประเทศที่ยากจน สาเหตุของปัญหานี้มีความซับซ้อน ซึ่งอาจมีสาเหตุมาจากการรับรู้เกี่ยวกับความเสี่ยง และ พฤติกรรมทางเพศที่ไม่เหมาะสม ดังนั้นการศึกษานี้จึงมีวัตถุประสงค์เพื่อศึกษาปัจจัยต่างๆที่มีความสัมพันธ์กับพฤติกรรมเสี่ยงทางเพศทั้งปัจจัยในระดับบุคคล ครอบครัว เพื่อน แฟน สื่อต่างๆ และ สภาพแวดล้อมที่เป็นบริบททางสังคม

5.วัตถุประสงค์

วัตถุประสงค์ในการศึกษาเพื่ออธิบายพฤติกรรมเสี่ยงทางเพศของวัยรุ่นและปัจจัยที่เกี่ยวข้องที่นำไปสู่ผลกระทบด้านลบต่อสุขภาพ

6.เหตุผลที่เชิญชวนให้ท่านเข้าร่วมโครงการวิจัยนี้

ท่านถือเป็นผู้ที่มีความสำคัญต่อการป้องกันพฤติกรรมเสี่ยงทางเพศ เนื่องจากการให้ข้อมูลต่างๆ เกี่ยวกับพฤติกรรมของวัยรุ่นจะเป็นฐานข้อมูลสำคัญ เพื่อเป็นประโยชน์ต่อการพัฒนาโปรแกรมในการป้องกันพฤติกรรมเสี่ยงทางเพศต่อไป

7.วิธีการวิจัย

เมื่อท่านสมัครใจเข้าร่วมโครงการวิจัย ท่านจะได้สนทนากลุ่มกับเพื่อนในวัยเดียวกันเกี่ยวกับประเด็นของสัมพันธภาพกับเพื่อน สื่อ และ บริบททางสังคมที่มีอิทธิพลต่อพฤติกรรมทางเพศ

8.ระยะเวลาที่ต้องทำการทดสอบในผู้ยินยอมตนให้ทำการวิจัย

การสนทนากลุ่มใช้เวลาทั้งหมดประมาณ 35-40 นาที

9.ประโยชน์ที่คาดว่าจะเกิดขึ้นทั้งต่อผู้ยินยอมตนให้ทำการวิจัยและต่อผู้อื่น

การเข้าร่วมในงานวิจัยนี้จะช่วยให้ท่านเข้าใจถึงปัจจัยที่เกี่ยวข้องกับพฤติกรรมเสี่ยงทางเพศ และข้อมูลที่ได้จะใช้เป็นแนวทางในการพัฒนากิจกรรมเพื่อป้องกันพฤติกรรมเสี่ยงทางเพศของวัยรุ่นในชุมชน

Version 10 January 2014

Ethical Review Committee
Faculty of Public Health, Mahidol University
COA. No. MUPH 2014 - 021
Date of Approval 14 Jan 2014

10.ความเสี่ยง หรือ ความไม่สบายใดที่คาดว่าจะเกิดขึ้นกับผู้ยินยอมตนให้ทำการวิจัยในระหว่างการเข้าร่วมการศึกษาวิจัย

ไม่มีข้อเสียต่อตัวท่านในการเข้าร่วมในงานวิจัยนี้ อย่างไรก็ตามท่านอาจมีความรู้สึกไม่สบายใจจากการนึกคิดเกี่ยวกับตัวเอง เพราะบางข้อคำถามอาจตรงไปตรงมา ถ้าท่านรู้สึกอึดอัด ไม่สบายใจ วิตกกังวล ท่านสามารถเลือกที่จะไม่ให้ข้อมูลในเรื่องนั้นๆ หรือ ยุติการสนทนาได้โดยไม่มีผลกระทบใดๆ

11.การดูแลรักษาความลับของข้อมูลต่างๆ ของผู้ยินยอมตนให้ทำการวิจัย

ไม่มีการเปิดเผยว่าผู้ใดให้ข้อมูลในการวิจัยนี้ ไม่สามารถเชื่อมโยงตัวท่านกับข้อมูล ข้อมูลที่บันทึกจะถูกเก็บในที่ที่ปลอดภัย ผู้วิจัยจะเป็นผู้ที่ดำเนินการเกี่ยวกับแยกแยะประเด็น หลังจากนั้นข้อมูลจะถูกเก็บรักษาในคอมพิวเตอร์ไฟล์ สมุดบันทึกจะถูกทำลายทันที การนำเสนอข้อมูลในงานวิจัย เราจะไม่นำเสนอข้อมูลที่บอกได้ว่าข้อมูลนั้นมาจากตัวท่านหรือสถานที่ของชุมชนที่ท่านพักอาศัย

12.สิทธิผู้ยินยอมตนให้ทำการวิจัยจะถอนตัวออกจากโครงการวิจัยได้ทุกเมื่อ

การตัดสินใจของท่านไม่มีผลกระทบต่อความสัมพันธ์ของท่านที่มีต่อทางชุมชนทั้งในปัจจุบันและในอนาคต ถ้าท่านเริ่มให้ข้อมูลและตอบแบบสอบถามและรู้สึกว่าท่านไม่ต้องการที่จะตอบข้อคำถามต่อไป ท่านสามารถหยุดได้ทุกเวลา ท่านสามารถเลือกที่จะไม่ตอบข้อคำถามที่ทำให้รู้สึกไม่สะดวกใจ

13.ผู้รับผิดชอบที่ผู้ยินยอมตนให้ทำการวิจัยสามารถติดต่อได้โดยสะดวก กรณีมีเหตุจำเป็น หรือฉุกเฉิน

ผู้รับผิดชอบในงานวิจัยนี้คือ Pasquale Finaldi และ รองศาสตราจารย์อาภาพร เผ่าวัฒนา

ท่านอาจจะถามคำถามที่ท่านสงสัยเดี๋ยวนี้ หรือต่อไปถ้าท่านมีข้อคำถาม ท่านสามารถติดต่อ รองศาสตราจารย์อาภาพร เผ่าวัฒนา ได้ที่

ที่อยู่ (ในเวลาราชการ) ภาควิชาการพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล

โทรศัพท์ (02) 354-8542

ที่อยู่ (นอกเวลาราชการ) 77/60 ถนนลาดพร้าว ซอย 3 แขวงลาดยาว เขตจตุจักร กรุงเทพฯ โทรศัพท์ (02) 938-5739

ท่านสามารถเก็บแบบฟอร์มนี้เพื่อไว้เป็นหลักฐาน

Version 10 January 2014

Ethical Review Committee
Faculty of Public Health, Mahidol University
COA. No. MU-PH 2014-021
Date of Approval 14 Jan 2014

APPENDIX D

CONSENT FORMS

EC-4 Form

D.1. Below legal age

Informed Consent Form

Project Title: Risky Sexual Behavior among Thai Adolescent in Bangkok Congested Areas
……
Responsible person(s) and institute: Pasquale Finaldi, Faculty of Public Health, Building 7, 5th floor Mahidol University

Date ……...…… (day/month/year)

I (Mr./Mrs./Ms.)…….……...……
Father/Mother/Legal Representative of …….
Home address……..…… Street……..…… Village number……..……
Sub district……. District…...……. Province……..…….. Postal code…..……..

I have read and understood all statements in the **information sheet**. I have also been explained the objectives and methods of the study, as well as possible risks and benefits that may happen to my son/daughter upon the participation in the study. I understand that the information will be kept confidential and no name will be declared in any case. I shall be given a copy of the signed **informed consent form**.
My son/daughter has the right to withdraw from the project at any time without any adverse effects upon him/herself

Signature…..……..… (Respondent/informant)
(…….……..)
Signature…… (Researcher)
(……...……....)

I cannot read but before having finger print on this **informed consent form**, the investigator/interviewer has read and explained to me in detail about the study, the information sheet and the **informed consent form** until I completely understood.

Signature……..… (Respondent/informant)
(…….)
Signature……..… (Researcher)
(..……..)

เอกสาร จธ 4

หนังสือยินยอมตนให้ทำการวิจัย

โครงการวิจัยเรื่อง พฤติกรรมเสี่ยงทางเพศของวัยรุ่นในชุมชนแออัด

วันที่ให้คำยินยอม วันที่ ..... เดือน ..... พ.ศ. 255.....

ข้าพเจ้า (นาย/นางสาว) .....ขอทำหนังสือนี้ไว้ต่อหัวหน้าโครงการเพื่อเป็นหลักฐานแสดงว่า

ข้อ 1. ก่อนลงนามในใบยินยอมตนให้ทำการวิจัยนี้ ข้าพเจ้าได้รับการอธิบายจากผู้วิจัยให้ทราบถึงวัตถุประสงค์ของการวิจัย กิจกรรมการวิจัย ความเสี่ยง รวมทั้งประโยชน์ที่อาจเกิดขึ้นจากการวิจัย อย่างละเอียด และมีความเข้าใจดีแล้ว

ข้อ 2. ผู้วิจัยรับรองว่าจะตอบคำถามต่างๆ ที่ข้าพเจ้าสงสัยด้วยความเต็มใจ ไม่ปิดบัง ซ่อนเร้น จนข้าพเจ้าพอใจ

ข้อ 3. ข้าพเจ้าเข้าร่วมโครงการวิจัยนี้โดยสมัครใจ และข้าพเจ้ามีสิทธิที่จะบอกเลิกการเข้าร่วมในโครงการวิจัยนี้เมื่อใดก็ได้ และการบอกเลิกการเข้าร่วมวิจัยนี้จะไม่มีผลกระทบต่อความสัมพันธ์ของข้าพเจ้าที่มีต่อทางชุมชนทั้งในปัจจุบันและอนาคต

ข้อ 4. ผู้วิจัยรับรองว่า จะเก็บข้อมูลเฉพาะเกี่ยวกับตัวข้าพเจ้าเป็นความลับ และจะเปิดเผยได้เฉพาะในรูปที่เป็นสรุปผลการวิจัย การเปิดเผยข้อมูลเกี่ยวกับตัวข้าพเจ้าต่อหน่วยงานต่างๆ ที่เกี่ยวข้อง กระทำได้เฉพาะกรณีจำเป็นด้วยเหตุผลทางวิชาการเท่านั้น

ข้อ 5. ผู้วิจัยรับรองว่า หากมีข้อมูลเพิ่มเติมที่ส่งผลกระทบต่อการวิจัย ข้าพเจ้าจะได้รับการแจ้งให้ทราบทันทีโดยไม่ปิดบัง ซ่อนเร้น

ข้าพเจ้าได้อ่านข้อความข้างต้นแล้วมีความเข้าใจดีทุกประการ และได้ลงนามในใบยินยอมนี้ด้วยความเต็มใจ

ลงชื่อ .....ผู้ปกครอง/ผู้อุปการะ

(.....)

ลงชื่อ ..... ผู้วิจัย

(Pasquale Finaldi)

Informed consent form version 10 January 2014

Ethical Review Committee
Faculty of Public Health, Mahidol University
COA. No. MUPH 2014 - 021
Date of Approval 14 Jan 2014

EC-4 Form

D.2. Above legal age

Informed Consent Form

Project Title: Risky Sexual Behavior among Thai Adolescent in Bangkok Congested Areas……
Responsible person(s) and institute: Pasquale Finaldi, Faculty of Public Health, Building 7, 5th floor Mahidol University

Date ……..…… (day/month/year)

I (Mr./Mrs./Ms.)…….……..……...……
Home address……..…… Street…….…… Village number……..……
Sub district……. District…...…….. Province……..…….. Postal code…..……..

I have read and understood all statements in the **information sheet**. I have also been explained the objectives and methods of the study, as well as possible risks and benefits that may happen to myself upon the participation in the study. I understand that the information will be kept confidential and my name will not be declared in any case. I shall be given a copy of the signed **informed consent form**.
I have the right to withdraw from the project at any time without any adverse effects upon myself.

Signature…..……..… (Respondent/informant)
(……..……..)
Signature…… (Researcher)
(……..……....)

I cannot read but before having finger print on this **informed consent form**, the investigator/interviewer has read and explained to me in detail about the study, the information sheet and the **informed consent form** until I completely understood.

Signature……..… (Respondent/informant)
(…….)
Signature……..… (Researcher)
(..……..)

เอกสาร จธ 4

หนังสือยินยอมตนให้ทำการวิจัย

โครงการวิจัยเรื่อง พฤติกรรมเสี่ยงทางเพศของวัยรุ่นในชุมชนแออัด

วันที่ให้คำยินยอม วันที่ ..... เดือน ..... พ.ศ. 255.....

ข้าพเจ้า (นาย/นางสาว) .....ขอทำหนังสือนี้ไว้ต่อหัวหน้าโครงการเพื่อเป็นหลักฐานแสดงว่า

ข้อ 1. ก่อนลงนามในใบยินยอมตนให้ทำการวิจัยนี้ ข้าพเจ้าได้รับการอธิบายจากผู้วิจัยให้ทราบถึงวัตถุประสงค์ของการวิจัย กิจกรรมการวิจัย ความเสี่ยง รวมทั้งประโยชน์ที่อาจเกิดขึ้นจากการวิจัย อย่างละเอียด และมีความเข้าใจดีแล้ว

ข้อ 2. ผู้วิจัยรับรองว่าจะตอบคำถามต่างๆ ที่ข้าพเจ้าสงสัยด้วยความเต็มใจ ไม่ปิดบัง ซ่อนเร้น จนข้าพเจ้าพอใจ

ข้อ 3. ข้าพเจ้าเข้าร่วมโครงการวิจัยนี้โดยสมัครใจ และข้าพเจ้ามีสิทธิที่จะบอกเลิกการเข้าร่วมในโครงการวิจัยนี้เมื่อใดก็ได้ และการบอกเลิกการเข้าร่วมวิจัยนี้จะไม่มีผลกระทบต่อความสัมพันธ์ของข้าพเจ้าที่มีต่อทางชุมชนทั้งในปัจจุบันและอนาคต

ข้อ 4. ผู้วิจัยรับรองว่า จะเก็บข้อมูลเฉพาะเกี่ยวกับตัวข้าพเจ้าเป็นความลับ และจะเปิดเผยได้เฉพาะในรูปที่เป็นสรุปผลการวิจัย การเปิดเผยข้อมูลเกี่ยวกับตัวข้าพเจ้าต่อหน่วยงานต่างๆ ที่เกี่ยวข้อง กระทำได้เฉพาะกรณีจำเป็นด้วยเหตุผลทางวิชาการเท่านั้น

ข้อ 5. ผู้วิจัยรับรองว่า หากมีข้อมูลเพิ่มเติมที่ส่งผลกระทบต่อการวิจัย ข้าพเจ้าจะได้รับการแจ้งให้ทราบทันทีโดยไม่ปิดบัง ซ่อนเร้น

ข้าพเจ้าได้อ่านข้อความข้างต้นแล้วมีความเข้าใจดีทุกประการ และได้ลงนามในใบยินยอมนี้ด้วยความเต็มใจ

ลงชื่อ .....ผู้ยินยอม

(.....)

ลงชื่อ ..... ผู้วิจัย

(Pasquale Finaldi)

Informed consent form version 10 January 2014

Ethical Review Committee
Faculty of Public Health, Mahidol University
COA. No. MU PH 2014 - 021
Date of Approval 14 Jan 2014

BIOGRAPHY

NAME	Mr. Pasquale Finaldi
DATE OF BIRTH	24 March 1969
PLACE OF BIRTH	Napoli, Italy
INSTITUTIONS ATTENDED	Bocconi University University, 1987-1998 Master of Science (Business Administration) University of Milano-Bicocca, 2003-2008 Master of Arts (Anthropological and Ethnological Sciences) Mahidol University, 20013-2014 Master of Public Health
HOME ADDRESS	Piazza Dei Daini 4 – 20126 Milano - Italy.