

NON-MARITAL COHABITATION AND HEALTH IMPLICATIONS AMONG UNDERGRADUATE STUDENTS IN TWO PROVINCES NEAR BANGKOK, THAILAND

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ABSTRACT: Non-marital cohabitation has emerged as a new form of living together in recent world. Studies have shown that large number of Thai adolescents and youth population engage in non-marital cohabitation which implicates numerous social and health problems. But, limited information is available on health effects of non-marital cohabitation among adolescents and youth in Thailand. This paper examines non-marital cohabitation behaviour among undergraduate students and its implications for their health. A cross-sectional behavioural survey was undertaken involving 438 students pursuing undergraduate degrees in two provinces near Bangkok, Thailand. About 27.6 percent students were found to have cohabitation. Cohabitants were reported to have a better self-reported mental health than non-cohabitants ($t = -3.4, P = 0.001$) while self-reported physical health was nearly the same in both groups. Health-risk behaviours such as alcohol consumption (OR = 2.716, 95% CI = 1.19-6.22) and unhealthy diet (OR = 0.585, 95% CI = 0.37-0.93) was significantly higher among cohabitants. However, less number of cohabitants were observed to practice unsafe sex (OR = 0.215, 95% CI = 0.07-0.65) than the non-cohabitants. Efforts need to be undertaken to educate undergraduate students about health implications of non-marital cohabitation and other associated risky behaviours.

Keywords: Non-marital cohabitation, Physical health, Mental health, Health behaviour, Unsafe sex, Thailand

INTRODUCTION

Cohabitation outside the institution of marriage has emerged as a new way of living together as a couple in the modern world. Although, traditional Thai societies permit cohabitation only in the context of wedlock, economic modernization and higher international travel over the past years have influenced the social norms related to marriage and companionship [1]. Additionally, the rise in rural to urban migration of Thai adolescents and young population in search of education and employment has freed them from the stringent traditional values and resistance of older generation. This contributes to a growing number of Thai youth accepting new forms of companionship and cohabitation [1].

Cohabitation practice among youth population without the institution of marriage not only creates socio-cultural issues [2], but also imposes health

risks for the cohabitants [3]. Non-marital childbearing, single motherhood and adolescent pregnancy are the possible adverse consequences of non-marital cohabitation, just to name a few [2, 4]. The rise in cohabitation among adolescents and youth implicates increasing rates of adolescent pregnancies in Thailand which has been identified as one of the important public health challenges for the country [5].

Previous studies have established positive impact of marriage on health and mortality [6-10], but health effects of cohabitation still remains inconsistent [11, 12]. Most of the researches conducted in this topic have analysed the health status and health behaviours of cohabitants as compared to married individuals [13-16]. However, limited studies examined the health effects of cohabitation when compared with never married group [17, 18]. Further, less has been explored about the health implications of cohabitation among adolescents and youth particularly in Thailand.

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The aim of this paper was to examine cohabitation behaviour among Thai undergraduate students as college going population are more adoptive towards modern lifestyle and thus are highly susceptible to engage in cohabitation behaviour. It further compared the physical and mental health status of students with and without cohabitation. Moreover, earlier studies have demonstrated that adolescents and youth generally tend to engage in multiple health risk behaviours [19]. Therefore, the current study also examined the associations between non-marital cohabitation and other health risk behaviours such as cigarette smoking, alcohol consumption, diet, physical activity and unprotected sexual behaviour among Thai undergraduate students.

MATERIALS AND METHODS

A cross-sectional behavioural survey was conducted between December 2013 to March 2014 to examine the cohabitation behaviour and its health implications among Thai students pursuing undergraduate studies. The study area was Pathumthani and Nakhon Nayok province of Thailand as no relevant data was found from past literature about cohabitation behaviour among undergraduate students in these two provinces. Further, a number of universities are located in these two provinces due to their close geographical proximity to Bangkok city. Thus, it was assumed that most of the undergraduate students pursuing studies in these universities might be staying nearby in these two provinces.

A multi-stage sampling method was used to select the study respondents. Firstly, a group of 20 undergraduate students were chosen as key informants from the host institution of researcher. Information was collected from them about the residential areas where most undergraduate students studying at different universities resided in the study area. Then, three residential localities in each of the two provinces were randomly selected. Finally, purposive sampling method was used to choose the study respondents from those selected localities using the key informant students. The inclusion criterion was Thai undergraduate students within an age group of 18-25 years and residing in rented dwellings for about six months or more with no family members staying together. All data were collected from the houses and apartments where the study respondents resided.

Due to lack of available data about the proportion of undergraduate students having cohabitation in the study area, it was assumed that,

approximately 50 percent of the undergraduate students were cohabitants with a desirable precision of the estimate to be 5% at 95% confidence interval (CI), yielding a minimum sample size of 384. Further, to allow exclusions after data collection, the final sample size of 484 was decided with an additional 100 respondents. Data collection process was continued till the final sample size was reached.

All data were collected using pre-tested, self-administered, anonymous questionnaire under the supervision of the researchers. A group of trained public health and nursing students assisted the researcher during the data collection process. The questionnaire was reviewed by three public health experts to ensure the content validity. Information were collected about respondent's socio-demographic and academic details, cohabitation status of last six months, self-reported physical health status, self-reported mental health status and health risk behaviours.

Measures

Independent variables were the respondent's socio-demographic and academic information and their cohabitation status while dependent variables include their self-reported physical and mental health status and other health risk behaviours such as alcohol consumption, smoking, physical exercise, diet and unsafe sex. The study respondents were grouped into two categories cohabitants and non-cohabitants based on their cohabitation status during last six months before the survey. Cohabitation was defined as staying together with a person of opposite gender for last six months or more preceding the survey with whom the subject is involved in a romantic relationship, but yet unmarried. Non-cohabitation denoted staying alone or staying together with a friend of same gender during the last six months before the survey.

Data about self-reported physical health status and mental health status were collected on five point rating scales. Other health-risk behaviours such as alcohol consumption, smoking, physical exercise, diet and unsafe sex were categories into two groups (Yes/No). Alcohol consumption status was defined as drinking alcohol at least once a week while smoking status was defined to be smoking at least one cigarette per week during the past one month of the survey. Physical exercise was defined as doing any kind of exercise for more than 3 days a week and healthy diet was defined as eating vegetables at least once a day and eating fast food less than 3 days a week during one month

Table 1 General characteristics of study respondents

Variables	Cohabitants	Non-cohabitants	All Respondents
	Number (%)	Number (%)	Number (%)
Age			
18-19	34 (28.1)	139 (43.8)	173 (39.5)
20-22	68 (56.2)	156 (49.2)	224 (51.1)
23-25	19 (15.7)	22 (6.9)	41 (9.4)
Gender			
Male	60 (49.6)	80 (25.2)	140 (32.0)
Female	61 (50.4)	237 (74.8)	298 (68.0)
Religion			
Buddhism	114 (94.2)	289 (91.2)	403 (92.0)
Islam	6 (5.0)	22 (6.9)	28 (6.4)
Christianity	1 (0.8)	6 (1.9)	7 (1.6)
Geographical region			
North	8 (6.6)	33 (10.4)	41 (9.4)
North-east	32 (26.4)	109 (34.4)	141 (32.2)
Central	49 (40.5)	104 (32.8)	153 (34.9)
East	14 (11.6)	30 (9.5)	44 (10.0)
West	6 (5.0)	5 (1.6)	11 (2.5)
South	12 (9.9)	36 (11.4)	48 (11.0)
Mother education			
Less than secondary school	46 (38.0)	132 (41.6)	178 (40.6)
Completed high school	51 (42.1)	114 (36.0)	165 (37.7)
Undergraduate	17 (14.0)	59 (18.6)	76 (17.4)
Graduate and above	7 (5.8)	12 (3.8)	19 (4.3)
Father education			
Less than secondary school	36 (29.8)	132 (41.6)	168 (38.4)
Completed high school	48 (39.7)	113 (35.6)	161 (36.8)
Undergraduate	20 (16.5)	52 (16.4)	72 (16.4)
Graduate and above	17 (14.0)	20 (6.3)	37 (8.4)
Faculty			
Health and allied	38 (31.4)	211 (66.6)	249 (56.8)
Non-health	83 (68.6)	106 (33.4)	189 (43.2)
Year of degree			
First year	43 (35.5)	179 (56.5)	222 (50.7)
Second year	32 (26.4)	62 (19.6)	94 (21.5)
Third year	28 (23.1)	51 (16.1)	79 (18.0)
Fourth year	18 (14.9)	25 (7.9)	43 (9.8)
GPA score			
Less than 2.5	40 (33.1)	91 (28.7)	131 (29.9)
2.5 – 3.5	64 (52.9)	181 (57.1)	245 (55.9)
More than 3.5	17 (14.0)	45 (14.2)	62 (14.2)
Total	121 (100)	317 (100)	438 (100)

preceding the survey. Unsafe sex was described as having sex without any contraception method in the past three months of the survey.

Data analysis

All data were analysed using SPSS computer software version 18. Descriptive statistics for all variables were calculated. Independent sample *t*-test was used to compare the self-reported physical and mental health status of cohabitants and non-cohabitants. Finally, adjusted odds ratio and 95% confidence interval were calculated using logistic regression analysis to identify the influence of

cohabitation on the health risk behaviours of students.

ETHICAL CONSIDERATIONS

The proposal for this study was reviewed and approved by the Ethics committee for Research of St. Theresa International College. Prior informed consent was taken with adequate explanation about the need and purpose of the study from each of the respondents before collecting data from them. Complete anonymity and confidentiality of information were strictly maintained.

Table 2 Cohabitation and Self-reported physical & mental health status

Cohabitation status	Total (N)	Self-reported physical health status				Self-reported mental health status			
		Mean	S.D	t	p value	Mean	S.D	t	p value
Cohabitants	121	3.64	0.784	0.436	0.246	3.99	0.861	-3.404	0.001
Non-cohabitants	317	3.74	0.707			3.70	0.789		

Table 3 Effects of cohabitation on health-risk behaviours of undergraduate students

Health-risk behaviours	All respondents	Non-cohabitants (Reference)	Cohabitants	Crude OR	Adjusted OR*	95% CI	p value
	Number (%)	Number (%)	Number (%)				
Alcohol consumption							
Yes	33 (7.5)	14 (4.4)	19 (15.7)	4.032	2.716	1.19-6.22	0.018
No	405 (92.5)	303 (95.6)	102 (84.3)				
Total	438 (100)	317 (100)	121 (100)				
Smoking							
Yes	27 (6.2)	13 (4.1)	14 (11.6)	3.060	1.577	0.64-3.85	0.317
No	411 (93.8)	304 (95.9)	107 (88.4)				
Total	438 (100)	317 (100)	121 (100)				
Physical exercise							
Yes	90 (20.5)	50 (15.8)	40 (33.1)	2.637	1.401	0.77-2.54	0.265
No	348 (79.5)	267 (84.2)	81 (66.9)				
Total	438 (100)	317 (100)	121 (100)				
Healthy diet							
Yes	248 (56.6)	189 (59.6)	59 (48.8)	0.644	0.585	0.37-0.93	0.023
No	190 (43.4)	128 (40.4)	62 (51.2)				
Total	438 (100)	317 (100)	121 (100)				
Unsafe sex							
Yes	23 (16.4)	12 (32.4)	11 (10.7)	0.249	0.215	0.07-0.65	0.006
No	117 (83.6)	25 (67.6)	92 (89.3)				
Total	140 (100)	37 (100)	103 (100)				

* Logistic regression (adjusted for age, gender, mother's education, father's education, faculty of study and GPA score)

RESULTS

A total of 484 respondents participated in this study from which 150 students reported to practice cohabitation. However, based on the operational definition of cohabitation, 29 students were excluded from the analysis as they reported to be cohabitating for less than six months at the time of the survey. Another 17 questionnaires were also excluded due to missing data. Among the rest 438 respondents, 121 students (27.6%) practiced cohabitation. The mean age of the cohabitating students (Mean, 21.13; SD, 2.485) was higher than the non-cohabitating students (Mean, 20.23; SD, 2.026).

Further, about 92 percent of respondents were Buddhists with a small number of Islam and Christian students. The respondents were found to have come from various provinces across Thailand to pursue undergraduate degrees in the study region of this research. Maximum number of students were from central and north-eastern region of the country. Around 40 percent parents of the respondents had an educational level of primary school or less than that.

Moreover, the sample consisted of about 56.8 percent students who were pursuing a bachelor degree in health or allied major. The academic Grade Point Average (GPA) score for non-cohabitants (Mean, 2.88; SD, 0.62) was marginally higher than the cohabitants (Mean, 2.82; SD, 0.62), Table 1.

Cohabitation and health status

The mean score of self-reported physical and mental health status were found to be 3.71 and 3.78 respectively on a 5-point rating scale. Comparison of physical and mental health status between cohabitants and non-cohabitants using independent sample t-test showed that the mental health scores for cohabitants were significantly higher ($t = -3.4$, $P \leq 0.001$) than the non-cohabitation group of students. The mean score of cohabitants for mental health was 3.99 as compared to 3.70 for non-cohabitants on a 5-point rating scale. However, no significant difference was observed between self-reported physical health status of cohabitants and non-cohabitants, Table 2.

Cohabitation and health-risk behaviours

Binary logistic regression analysis demonstrated that cohabitation had significant effect on all five health-risk behaviours. However, after adjusting for socio-demographic and academic factors such as age, gender, mother's education, father education, faculty of study and GPA score, it was observed that cohabitation had statistically significant effect on alcohol drinking, diet and sexual behaviour of students. The chances of alcohol consumption among cohabitating students were found to be 2.7 times (OR = 2.716, 95% CI = 1.19-6.22) higher than the non-cohabitating students. Similarly, consumption of healthy diet was also found to be 41 percent lower (OR = 0.585, 95% CI = 0.37-0.93) among the cohabitants than non-cohabitating students.

As regards to sexual behaviour, higher proportion of cohabitants (85.1%) were reported to have experienced sex within past 3 months than the non-cohabitants (12%). On the contrary, unsafe sex without any contraception method was found to be about 78 percent lesser (OR = 0.215, 95% CI = 0.07-0.65) among cohabitantes as compared to students in the non-cohabitation group. Smoking and physical exercise were not found to be associated with cohabitation status, Table 3.

DISCUSSION

The findings of this study demonstrated that about 28 percent of undergraduate students reported to have cohabitating relationship for last six months or more preceding the survey. This study revealed that cohabitation among the students has many harmful health implications. Although, the self-reported physical health status of cohabitants was not found much different from others, cohabitation demonstrated positive benefit as regards to mental health of students. This corresponds to another study conducted among adolescents in United States [3]. The present study findings demonstrated that cohabitating students had a better mental health status than those who are single which is similar to the results of a study conducted among Norwegian college students [18].

Further, certain health-risk behaviours were observed to be highly prevalent among cohabiting students. Alcohol drinking was found to be higher among cohabitants than non-cohabitants which correspond to another multi-country study which illustrated that cohabitation was associated with heavy alcohol consumption [20]. In addition, unhealthy dietary behaviour was also higher among the cohabitants than the non-cohabitants which was similar to the findings of another study conducted

among US adolescents which revealed that married and cohabitating couples staying together were more likely to become obese than those who were only dating [21]. However, both groups reported similar levels of smoking [15] and physical activity.

Furthermore, sexual practice was found to be higher among cohabitants than the non-cohabitants. However, unsafe sexual practices were reported to be higher among the non-cohabitants than those in a cohabitating relationship. This showed that the non-cohabitants have a higher risk of getting pregnant and other sexually transmitted diseases than the cohabitating students as they engaged in risky sex without the use of contraception.

LIMITATIONS OF THE STUDY

The data collected for this study were based on the self-reported information of the respondents which may differ from the actual findings. However, the study respondents were persuaded to provide correct information during data collection with the assurance for complete confidentiality and anonymity. In this study, nonprobability sampling methods were used to select respondents who may not be accurately represent the study area. But, it was attempted to compensate for this through higher sample size. Large-scale representative surveys may be carried out for further exploration about the health impacts of non-marital cohabitation among adolescence and young adults in Thailand.

CONCLUSIONS

Non-marital cohabitation among undergraduate students possessed numerous health implications. The study findings can be summarized as cohabitation had a mixed effect on the health of undergraduate students with some noticeable health related concerns. Although, it is perceived to provide better psychological wellbeing, but, higher alcohol consumption and unhealthier diet could lead to hazardous impact on the health of students in long term. Practice of non-marital sex was also more common among cohabitants. On the contrary, reportedly single and dating students had more unsafe sex behaviour than cohabiting students. Therefore, special health education initiatives should be carried out by the universities about cohabitation as well as other associated health risk behaviours so as to protect the students from present as well as future health implications.

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