Influence of Mental Health on Preventive Behavior towards Premature - Sexual Intercourse among Junior High School Students in Thailand

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Abstract

This study aimed to identify influence of mental health on preventive behavior towards premature-sexual intercourse among junior high school students in Thailand. A cross-sectional survey, consisting of a questionnaire was self-administered to 260 junior high school students randomly selected by stratified sampling technique. Stepwise multiple regression analysis was performed to determine the factors included mental health affecting preventive behavior towards sexual intercourse among junior high school students. Seven factors were statistically significant with preventive behavior towards sexual intercourse among junior high school students and were found to make a unique contribution to this prediction. Correlation for regression was significantly different with R² at 0.422. The adjusted R² value of 0.407 indicated that 40.7% of the variability in mental health affected on preventive behavior towards sexual intercourse among junior high school students. The seven factors were: normal level of mental health (Beta = 0.482), sex values (Beta = 0.431), knowledge of sex education (Beta = 0.247) which associated positively towards preventive behavior in premature-sexual intercourse, junior high school students, who had alcohol drinking, had less preventive behavior towards premature-sexual intercourse than those who had not (Beta = -0.159), junior high school students, who had money saving, had less preventive behavior towards premature-sexual intercourse than those who had not (Beta = 0.153), and the students, who had boy or girl friend, had less preventive behavior towards premature-sexual intercourse than those who had not (Beta = 0.112). With respect to recommendations, junior high school students should be promoted mental health in order to increase preventive behavior towards premature-sexual intercourse.

Keywords: Mental Health; Preventive Behavior; Premature-Sexual Intercourse; Junior High School Students.

Introduction

Premature sexual intercourse or sexual intercourse among students has become a major issue in Thailand, as it affected to students’ quality of life such as teen age pregnancy, sexually transmitted infection, education failure, and stigma in society. Aekplakorn, et al., studied sexual behavior among teens aged 10-19 and found that 17.9% of male students had sexual intercourse and 7.3% of female students had sexual intercourse [1]. According to pregnancy survey in Thailand in 2017, 5.9% of female teens aged 10-17 had pregnancy [2]. Most pregnant teens have to cease their study in order to provide child care for their babies and also, they have to face with lack of income [3]. Department of Disease Control, Ministry of Public Health in Thailand reported that morbidity rate of sexually transmitted infection among teens aged 15-24 had increased from 19.03 in 2007 to 23.76 in 2015 [4]. In 2017, 129 teen students had sexually transmitted infection [5]. These situations illustrate that these effects cause from premature-sexual intercourse. Therefore, prevention of risk behavior towards premature-sexual intercourse in teens should be operated before they have sexual intercourse, or become early teens. The early teens should be evaluated pre-sexual behavior in order to prevent teenage pregnancy and sexually transmitted infection.

Materials and Methods

Study Design

A cross-sectional survey was employed among junior high school students randomly selected by stratified sampling technique. Stepwise multiple regression analysis was performed to determine the factors included mental health affecting preventive behavior towards sexual intercourse among junior high school students. Seven factors were statistically significant with preventive behavior towards sexual intercourse among junior high school students and were found to make a unique contribution to this prediction. Correlation for regression was significantly different with R² at 0.422. The adjusted R² value of 0.407 indicated that 40.7% of the variability in mental health affected on preventive behavior towards sexual intercourse among junior high school students.
students who lived in muang district, Kamphaeng Phet province, Thailand where teenage pregnancy rate was reported in a highest level in Thailand [2]. Of those, 260 were selected randomly by stratified sampling technique and a questionnaire was self-administered by those participants. A questionnaire consisted of close-ended questions emphasized on socio-demography, sexual risk behavior, sex education, attitude towards sex, being taught about sex education by teachers, being taught about sex education by parents, preventive behavior towards premature sexual intercourse, and mental health test from Ministry of Public Health. The Cronbach alpha coefficient in each part of the questionnaire was 0.71, 0.86, 0.82, 0.78, 0.79, 0.75, and 0.84 respectively.

Subjects

The subjects used for this study were drawn from all those aged between 14 and 16 (N=3,242) registered at the selected randomly schools. Two-hundred-and-sixty student names were randomly selected as potential subjects in this study.

Data Analysis

Regarding the cross-sectional survey, its data were analyzed using SPSS. Descriptive statistics were used for summarizing socio-demography, sexual risk behavior, sex education, attitude towards sex. Stepwise multiple regression analyses were used to identify socio-demography, sexual risk behavior, sex education, attitude towards sex, being taught about sex education by teachers, being taught about sex education by parents, and preventive behavior towards premature-sexual intercourse affecting on normal level of mental health.

Ethical Considerations

Human Ethic procedures were approved by Naresuan University’s Human Ethics Committee and carried out in accordance with the tenets of the Treaty of Helsinki. Potential subjects were contacted by the researcher and invited to participate in the study. The purposes of the study were explained to them. Also, they were informed that they had their rights to decline to participate, to withdraw from participation at any time or to refuse to answer any questions. The anonymity of the participants was protected with data stored by participant code only and kept in a controlled place. All data were damaged by document shredder and all electronic files were deleted.

Results

Regarding sample characteristics as well as socio-demography shown in Table 1, the majority of respondents were female (N=134; 51.5%). Most of the subjects studied at junior high school level 3 (N=95; 36.5%). Of overall subjects, over half of them had sufficient expenses (N=143; 55.0%). Most students reported that their parents’ marital status was married (N=153; 58.8%), their fathers’ occupation (N=125; 48.0%) and mother’s occupation (N=138; 53.1%) were employee. Most students were living with single father, single mother, or both parents (N=171; 65.8%). The major subjects lived in urban area (N=177; 68.1%). Most of them had normal level of metal health (mental health test from Ministry of Public Health) (N=187; 71.9%).

Table 1. Characteristics and socio-demography (N = 260).

| Characteristics and socio-demography | % (number) |
|--------------------------------------|------------|
| Gender                               |            |
| Male                                 | 48.5 (126) |
| Female                               | 51.5 (134) |
| High school level                    |            |
| level 1                              | 30.8 (80)  |
| level 2                              | 32.7 (85)  |
| level 3                              | 36.5 (95)  |
| Sufficiency of expenses              |            |
| not sufficient                       | 11.1 (29)  |
| sufficient                           | 55.0 (143) |
| Sufficient and saving remain         | 33.9 (88)  |
| Marital status of parents            |            |
| married                              | 58.8 (153) |
| Widowed/separated                    | 41.2 (107) |
| Father’s occupation                  |            |
| employee                             | 48.0 (125) |
| farmer                               | 23.8 (62)  |
| merchant                             | 15.4 (40)  |
| government official                  | 2.3 (6)    |
| other(unemployed, dead)              | 6.5 (17)   |
| Mother’s occupation                  |            |
| employee                             | 53.1 (138) |
| farmer                               | 19.6 (51)  |
As can be seen in Table 2, risk behaviors towards sexual intercourse were divided into 6 major risk behaviors such as having had boyfriend/girlfriend, having had alcohol drinking, watching obscene book/porno book, watching nude VDO or porn VDO, and having nightlife. 70.8% of total subjects had had boyfriend/girlfriend. Female students reported that 79.9% of them used to have boyfriend. In contrast, only 61.1% of male students had had girl friend. In terms of having boyfriend/girlfriend in present, overall students reported that 41.9% of them had had boy friend/girl friend. Over half of female

| Risk behaviors towards sexual intercourse | % (number) |
|----------------------------------------|------------|
|                                         | male | female | Total |
| Having had boyfriend/girlfriend         |      |        |       |
| Yes                                    | 61.1 (77) | 79.9 (107) | 70.8 (184) |
| No                                     | 38.9 (49) | 20.1 (27) | 29.2 (76) |
| Having boyfriend/girlfriend            |      |        |       |
| Yes                                    | 28.6 (39) | 53.4 (70) | 41.9 (109) |
| No                                     | 71.4 (90) | 46.6 (61) | 58.1 (151) |
| Having had alcohol drinking            |      |        |       |
| No                                     | 62.7 (79) | 56.0 (75) | 59.2 (154) |
| Yes                                    | 37.3 (47) | 44.0 (59) | 40.8 (106) |
| rarely                                  | 18.3 (23) | 24.6 (33) | 21.5 (56) |
| occasionally                            | 17.4 (22) | 15.7 (21) | 16.5 (43) |
| often                                   | 1.6 (2) | 3.7 (5) | 2.8 (7) |
| Watching obscene book/porno book        |      |        |       |
| No                                     | 59.5 (75) | 82.0 (110) | 71.1 (185) |
| Yes                                    | 40.5 (51) | 18.0 (124) | 28.9 (75) |
| once a month                            | 18.2 (22) | 12.6 (17) | 15.0 (39) |
| once a week                             | 12.0 (15) | 3.8 (5) | 7.7 (20) |
| every other day                         | 6.3 (8) | 0.7 (1) | 3.5 (9) |
| everyday                                | 4.8 (6) | 0.7 (1) | 2.7 (7) |
| Watching nude VDO or porn VDO          |      |        |       |
| No                                     | 46.8 (59) | 78.3 (105) | 63.1 (164) |
| Yes                                    | 43.2 (67) | 21.7 (29) | 36.9 (96) |
| once a month                            | 38.1 (48) | 18.7 (25) | 28.1 (73) |
| once a week                             | 9.5 (12) | 3.0 (4) | 6.1 (16) |
| every other day                         | 2.4 (3) | 0.0 (0) | 1.2 (3) |
| everyday                                | 3.2 (4) | 0.0 (0) | 1.5 (4) |
| Having nightlife                         |      |        |       |
| No                                     | 78.6 (99) | 79.1 (106) | 78.8 (205) |
| Yes                                    | 21.4 (27) | 20.9 (28) | 21.2 (55) |
| rarely                                  | 15.9 (20) | 17.9 (24) | 17.0 (44) |
| often                                   | 5.6 (7) | 3.0 (4) | 4.2 (11) |
Table 3. Factors affecting preventive behavior towards premature-sexual intercourse among junior high school students.

| Factors                        | B     | R Square | R Square change | Beta   | t-value | p-value |
|-------------------------------|-------|----------|-----------------|--------|---------|---------|
| Normal level of mental health | -4.428| 0.250    | 0.000           | 0.482  | 7.988   | 0.000   |
| Sex values                    | 0.717 | 0.262    | 0.012           | 0.431  | 7.667   | 0.000   |
| Knowledge of sex education    | 0.831 | 0.317    | 0.055           | 0.247  | 4.512   | 0.000   |
| Alcohol drinking              | -3.813| 0.357    | 0.040           | -0.159 | 2.969   | 0.000   |
| Money expenses and saving     | -3.900| 0.386    | 0.029           | -0.153 | 2.972   | 0.003   |
| Being taught by parents       | -0.309| 0.406    | 0.020           | -0.142 | 2.158   | 0.012   |
| Having boyfriend/girlfriend   | -2.680| 0.422    | 0.016           | -0.112 | 2.150   | 0.033   |

Constant = 26.832, Multiple R = 0.650, R Square = 0.422, R Square Adjusted = 0.407

students had boy friend (N= 70; 53.4%), whereas 28.6% of male students had girl friend. With respect to alcohol drinking, over half of total subjects (N= 154; 59.2%) did not have alcohol drinking. Male students did not have alcohol drinking (N= 79; 62.7%) rather than female students (N= 75; 56.0%). For watching obscene book/porno book and nude VDO, 71.1% of overall students had never watched obscene book/porno book and 63.1% of them had never watched nude VDO. 78.8% of overall students had never had nightlife.

As can be seen in Table 3, stepwise multiple regression was used to assess the ability of 10 control measures (having nightlife, watching nude VDO, watching obscene book/porno book, normal level of mental health, sex values, knowledge of sex education, alcohol drinking, money expenses and saving, being taught by parents, having boyfriend/girlfriend) to predict preventive behavior towards premature-sexual intercourse among junior high school students. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity [6]. The results were found that only seven control measures explained an additional 42.2% (40.7% adjusted) of the variance. Seven control measures were statistically significant, with preventive behavior towards premature-sexual intercourse among junior high school students. Thus, these seven variables were found to make a unique contribution to this prediction. These variables were normal level of mental health ($\beta = 0.482, p < 0.001$), sex values ($\beta = 0.431, p < 0.001$), knowledge of sex education ($\beta = 0.247, p < 0.001$), alcohol drinking ($\beta = -0.159, p < 0.001$), money expenses and saving ($\beta = -0.153, p = 0.003$), being taught by parents ($\beta = -0.142, p = 0.012$), having boy friend/girl friend ($\beta = -0.112, p = 0.033$) respectively.

**Discussion**

The discussion integrates the findings to address the research objective. The factors influenced on preventive behavior towards premature-sexual intercourse among junior high school students were normal level of mental health, sex values, knowledge of sex education, alcohol drinking, money expenses and saving, being taught by parents, having boyfriend/girlfriend respectively.

Regarding normal level of mental health, students who had normal level of mental health would be able to have preventive behavior towards premature-sexual intercourse compared to the student who had not. Also, Svensson, F., Fredlund, C., Svedin, C., Priebe, G., and Wådsby, M. found that mental health associated with sex behavior in adolescents [7].

Sex value affects positively to preventive behavior towards premature-sexual intercourse because the right value of sex can cause appropriate sex behavior such as mature-sexual behavior [8]. Similarly, Rawajai found that sex value affected to risk behavior of sexual intercourse among students at collages in Bangkok [9]. This finding associated with Sawangtook and Thanio’s study [10]. They found that ten students who had different sex value would have different sex behavior. For example, ten students, who reserved themselves from premature-sexual intercourse, would have preventive behavior.

Knowledge of sex education affected positively to preventive behavior towards premature-sexual intercourse because education could lead to good practice [11]. Thus, sex education can cause prevention of premature-sexual intercourse among junior high school students. Besides, Danpradit, et al., [12] found that sex education program affected significantly to avoidance of premature-sexual intercourse and teenage pregnancy. Having knowledge of sex education can lead to low risks of premature-sexual intercourse among teens [13].

In terms of alcohol drinking, students, who have alcohol drinking, will have less preventive behavior of premature-sexual intercourse than those who have not. Alcohol will make people lose self-control and it can lead to have sexual intercourse easily [14]. Likely Lekphet, et al., [15] found that high school students who had alcohol drinking had higher risks of sexual intercourse than those who had not.

Students who have sufficient expenses and money saving will have less preventive behavior of premature-sexual intercourse than those who have not because student who have much money will be able to spend money for sexual intercourse at nightclub. Teen students are not mature for money expenses, so that those expenses may lead to sexual intercourse without difficulty [16].

Being taught by parents can affect negatively to preventive behavior of premature-sexual intercourse. Too much parents’ teachings to adolescents can lead to negative actions towards parents from those teens. Sahay, et al., [17] found that being taught frequently about safe sex or prevention of premature-sexual intercourse can cause risk behavior of premature-sexual intercourse because teenagers may feel bored or resist what parent teach [18]. Furthermore, Chaysree, et al., [19], Sidze & Defo [20] found that family relationship associated with risk behavior towards premature-sexual intercourse. Also, weakness of family relationship can cause premature-sexual intercourse [20, 21].
Students who have boyfriend or girlfriend trend to have less preventive behavior of premature-sexual intercourse than those who have not. Companionship, touching, and immaturity can cause premature-sexual intercourse [10]. In addition, Junnual et al., [16] found that most early teens had first sexual intercourse with their boyfriend or girlfriend. Similarly, Wong-arra, Kongnguen & Vuthiarpa [22] found that having boyfriend among female teens associated with risk behavior towards premature-sexual intercourse.

**Conclusion**

To sum up, the findings of the study illustrated that factors included mental health affecting preventive behavior towards premature-sexual intercourse among junior high school students. The factors influenced on preventive behavior towards premature-sexual intercourse among junior high school students were normal level of mental health, sex values, knowledge of sex education, alcohol drinking, money expenses and saving, being taught by parents, having boyfriend/girlfriend respectively. These findings presented that mental health was the key factor for encouraging junior high school students to prevent premature-sexual intercourse.

**Acknowledgements**

I acknowledge the junior high school students in muang district, Kamphaeng Phet province, Thailand for sharing their experiences. Also, I kindly thank school directors in muang district, Kamphaeng Phet province for providing me some useful information and the convenience to access to the research area. In terms of the research grant, I have to thank the National Research Council of Thailand (NRCT) for providing me financial support.

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