Factors Affecting Health-Promoting Behavior of Undergraduate Students, Ubon Ratchathani University

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Background: *Undergraduate students are going through the transitional period from children to adulthood. Promoting healthy behavior during this period increases their chances of being healthy in the future.*
Objective: *To determine the relationships between and among knowledge, attitudes, health promoting values, accessing health services, receiving health information from the media, and health promoting behavior.*
Material and Method: *A cross-sectional analytic study with proportionate stratified random sampling was performed on a sample of 500 undergraduate students from Ubon Ratchathani University. Data were collected between August and September 2015 by using self-reporting questionnaire.*
Results: *Knowledge and attitudes in a high percentage, 60.2 and 59.6 respectively, health promoting values were moderate percentage of 89.2, and accessing health services of 90.0, receiving social support from family almost every aspect. Health promoting behavior was moderate 52.8 percent. Variables which could significantly predict to health-promoting behavior were corporate attitudes, health promoting values, social support and knowledge about health promotion. The predictors all together accounted for 12.0 percent of the variance in health-promoting behavior.*
Conclusion: *These finding suggest that interventions are needed to enhance the practice of health promoting behaviors and should be focused on attitudes, health promoting values, social support and knowledge about health promotion.*

Keywords: *Health-promoting behavior, Undergraduate students, Ubon Ratchathani University*

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Health promotion is an important determinant for individual health status, which held them responsible for their own health[1]. University students are going through a transitional period from children to adulthood[2]. Higher education is important because life is a learning of various disciplines including life skills at the end of the work[3]; the National Education Act stipulates that study aims to give students complete physical, mental, moral understanding for living happily in society. It requires that educational levels aim at improving the quality of life in order to suit the age and capacity of health factors that affect learning and other activities of the students to make them happy[4]. Patterns of illness and disease have changed from their original due to the increase in non-communicable diseases, mainly related to lifestyle behavior and associated with their health[5]. Health behavior helps reduce such problems. Health is a critical component of quality of life. It represents a complete physical, mental, social and spiritual understanding[6], most college students are in the late teens 17-21 years (late adolescence) during these emotional and social changes[7]. The results of medical examinations of new students in many universities found overweight problems, lacked regular exercise and inability to deal with stress, including the problems of sexual risk behavior[8] where these issues will affect the quality of education.

The study of health status of first-year students of Ubonratchathani found that health risk behavior was food consumption, not enough physical activity, drug abuse and having unsafe sex, respectively[9], It is evident that promoting healthy lifestyle behavior among first year students is essential in decreasing disease risk later in adulthood; thus, it is important to investigate their health-promoting behavior. This research was conducted to determine the level of student engagement in health promoting

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behavior and its association with socio-demographic factors by applying PRECEDE-PROCEED Framework of L. Green[10] to modify or enhance the behavior of students by organizing academic services to meet the needs of students as well as a basis for further research.

Material and Method

The study was carried out in a sample of 500 undergraduate students, randomly selected from the eleven faculties at Ubon Ratchathani University, from August and September 2015, by using proportionate stratified random sampling methods. The estimated sample size was for evaluating the relationship between the knowledge of physical activity and physical activity of midlife women based on statistical significance level of 5% and power of 80%. All subjects were apprised of the purpose of the study and signed an informed consent document. The study was approved by the Ethics Committee of Ubon Ratchathani University (UBU-REC-2/2015).

An eight-part questionnaire was used to measure health promoting behavior (18 items), knowledge of health promoting behavior (18 items), attitudes (18 items), social support (18 items), health promotion value (18 items), accessing health services (3 items), receiving health information from the media (10 items) and general data (7 items). KR-20 was used to analyze the knowledge part, more than 0.5 in each item, Cronbach's Alpha Coefficient was used to analyze the internal consistency of the rest part of the questionnaire. The coefficients were ranging from 0.68 for Physical activity to 0.97 from Social support.

Outcomes and measurements

Health promoting behavior was the main outcome and classified each item of health promoting behavior, attitudes, health promoting value, receiving health information from the media and social support scale was measured on a 5-point, forced-choice scale ranging from 1 (strongly disagree or very unsure) to 5 (strongly agree or very sure).

Each item of knowledge of health promoting behavior and accessing health services were measured on scales of 1 (yes) or 0 (no). The knowledge was classified to be low (0-59%), moderate (60-79%) or high (80-100%) according to the total answer scores of knowledge part. Accessing health services was classified to be low (0-79%) or high (80-100%).

Data analysis

Frequency distribution, mean and standard deviation were used to describe demographic variables. Stepwise multiplelinear regression was used to assess the relationship between the factors of interest and health promoting behavior.

Results

The results were analyzed from 500 undergraduate students. Most of the respondents were female (70.8%), aged between 17-23 years, most of them (25%) from the faculty of Management Science. The total sample Administration showed no underlying disease. The demographics were: dormitory residents (94.4%), average family income, 20,000 baht per month, marital status of parental couples (94.4%).

Knowledge and attitudes of health-promoting behavior was in a moderate percentage of 60.2 and 59.6, respectively, health-promoting values were a high percentage of 89.2 and accessing health services of 90 percent, most receiving health information from social-media, with some social support coming from family in all aspects, except that exercise was supported by friends. Health promoting behavior was a moderate 52.8 percent.

Correlation and multiple regression analyses were conducted to examine the relationship between first year students and various potential predictors. Table 1. summarizes correlation analysis results. As can be seen, each of the health-promoting scores is positively and significantly correlated with the predisposition and reinforcement. Those with higher scores on these variables tend to have higher health-promoting behavior scores. The stepwise multiple

Table 1. Pearson product moment correlation between predisposing, enabling, reinforcing, factors and health promoting behavior

Variables	Pearson correlation coefficient (r)	*p*-value
Predisposing factors		
Age	0.02	0.730
Knowledge	0.16**	<0.001
Attitude	0.22**	<0.001
Value	0.16**	<0.001
Enabling factors		
Family income	0.03	0.430
Reinforcing factors		
Information support	0.08	0.060
Social support	0.19	<0.001

Table 2. Summary statistics and results from the linear regression analysis

Factors	B	SE (b)	Beta	t	*p*-value
Attitudes	0.20	0.05	0.19	4.50	<0.001
Social support	0.07	0.02	0.18	4.13	<0.001
Health promoting values	0.23	0.06	0.15	3.59	<0.001
Knowledge in health promotion	0.46	0.19	0.11	2.41	0.010
Gender	1.38	0.67	0.09	2.06	0.040

Constant = 50.13, $R^2 = 0.12$, $R^2_{adj} = 0.12$, F = 13.9

regression model with all five predictors produced $R^2 = 0.12$, $p<0.001$. As can be seen in Table 2, the health-promoting behavior and attitudes, social support, health-promoting values, knowledge in health promotion and sex had significant positive regression weights, indicating students with higher scores on these scales were expected to have higher health-promoting behavior scores, after controlling for other variables in the model.

Discussion

The level of knowledge in health-promoting of students were high, 60.2 percent could be because health promoting knowledge was taught in secondary school covering all aspects. Students learning or gaining knowledge from various media such as consulting the internet, Line, and Facebook, as well as the fact that most of the students live near the site of health service, including hospitals, sports and recreation facilities and also have access to the health services at more than 90 percent. Health promoting knowledge was high similar to the factors that influence the health behaviors of university students by Saravirote A[11]. With regard to answers concerning stress management and safe sex behavior, 66.0 and 45.0 percent, respectively, the answers were wrong indicating that most students still do not have a full understanding of these behavioral components.

The overall level of attitude in health-promoting was high (59.6%). When classified by item, it was found that attitudes for coping with stress and food consumption had the lowest scores. Feeling of individual to thing is abstract and cause of action. Attitudes need to be stimulated which will lead to action or reaction consistent with studies by Pender which found that attitude can be used to describe the behavior of individual health by a person with a positive attitude towards health promoting behavior; attitude will affect health-promoting behavior[12].

Levels of health-promoting values were high, 89.2 percent, and when classified by item it was found that having risky sex, not using condoms, students who were healthy did not need to exercise, and consumed fast food, considered to be of the new era. This may be due to societal changes; the transition to adulthood may also require choosing a direction. Consistent with the concept of Pender[12], the health values will stimulate and encourage healthy behavior. Students received health information from the Internet, Line, Facebook, and family members, respectively. The current digital age in which communication through such channels as the channels that modern humans began to use more and will replace the traditional media which was consistent with the findings obtained from a group of students at Prince of Songkla University by Saravirote[11]. There it was found that obtaining health information from the internet influenced health behavior. Health-promoting behavior was moderate of 52.8. Consistent which the finding of Rongruang[3], the level of health promotion behavior was medium.

Knowledge, attitudes and health-promoting values are positively correlated with health promoting behavior and statistically significant. The correlation coefficient of Pearson was 0.16, 0.22, and 0.17, respectively. Social support was positively correlated with health-promoting-behavior and statistically significant (R = 0.19, *p*-value <0.001). This result was consistent with previous study performed at Maejo University indicating that the cognitive-perceptual factors of health-promoting values had a positive correlation with health promoting behavior in students[13].

Factors that could predict health-promoting behavior including attitudes, health-promoting values, social support, knowledge about health promotion and sex ($p<0.001$), which is the fourth variant could explain the variability behavior of 12 ($R^2 = 0.12$), consistent with the study of a development model of health

promotion activities for university students in the Eastern Region[14] where it was found that elements were associated with health-promoting behavior including social support and health promoting values. This is similar to the findings of Saravirote and Janyam[11] found that the factors that influence health behavior were gender and social support.

Conclusion

This study evaluated health-promoting behavior of undergraduate students, Ubon Ratchathani University. These findings suggest that interventions are needed to enhance the practice of health-promoting behavior. These interventions should focus on attitudes, health promoting values, social support and knowledge about health promotion.

What is already known on this topic?

Previous studies reported factors that were able to predict the health promotion behavior significantly: receiving information from the media, policies of health promotion behavior, health advice from other persons, perception of health status and sex.

What this study adds?

Variables which could significantly predict health-promoting behavior were corporate attitudes, health promoting values, social support and knowledge about health promotion. The predictors all together accounted for 12.0%.

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Potential conflicts of interest

None.

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ปัจจัยที่มีผลต่อพฤติกรรมส่งเสริมสุขภาพนักศึกษามหาวิทยาลัยอุบลราชธานี

มินตรา สาระรักษ์, กิตติ เหลาสุภาพ

ภูมิหลัง: *นักศึกษาระดับปริญญาตรีเป็นวัยที่กำลังเปลี่ยนผ่านจากวัยเด็กเป็นวัยผู้ใหญ่ การส่งเสริมสุขภาพตลอดช่วงดังกล่าวจะเป็นการเพิ่มโอกาสให้พวกเขามีสุขภาพดีในอนาคต*

วัตถุประสงค์: *เพื่อหาความสัมพันธ์ระหว่างความรู้ ทัศนคติ ค่านิยม การเข้าถึงบริการสุขภาพ การรับรู้ข้อมูลข่าวสารจากสื่อกับพฤติกรรมส่งเสริมสุขภาพ*

วัสดุและวิธีการ: *เป็นการศึกษาแบบภาคตัดขวางเชิงวิเคราะห์โดยการสุ่มตัวอย่างแบบแบ่งชั้นภูมิตามสัดส่วน กลุ่มตัวอย่างเป็นนักศึกษาปริญญาตรีชั้นปีที่ 1 จำนวน 500 คนเก็บรวบรวมข้อมูลระหว่างเดือนสิงหาคมถึงเดือนกันยายน พ.ศ. 2558 โดยใช้เครื่องมือเป็นแบบสอบถาม*

ผลการศึกษา: *ความรู้และทัศนคติอยู่ในระดับสูงร้อยละ 60.2 และ 59.6 ตามลำดับค่านิยมด้านการส่งเสริมสุขภาพอยู่ในระดับปานกลางร้อยละ 89.2 มีการเข้าถึงสถานบริการด้านสุขภาพร้อยละ 90.0 ส่วนใหญ่ได้รับการสนับสนุนทางสังคมจากครอบครัว พฤติกรรมส่งเสริมสุขภาพอยู่ในระดับปานกลางร้อยละ 52.8 ปัจจัยที่ร่วมกันทำนายพฤติกรรมส่งเสริมสุขภาพของนักศึกษาระดับปริญญาตรีคือ ทัศนคติ ค่านิยมด้านการส่งเสริมสุขภาพ การสนับสนุนทางสังคม และความรู้ด้านการส่งเสริมสุขภาพซึ่งปัจจัยเหล่านี้สามารถร่วมกันทำนายพฤติกรรมส่งเสริมสุขภาพได้ร้อยละ 12*

สรุป: *ข้อเสนอแนะจากการวิจัยนี้ควรมีการพัฒนาพฤติกรรมส่งเสริมสุขภาพนักศึกษาชั้นปีที่ 1 โดยเน้นที่ทัศนคติ ค่านิยม การสนับสนุนทางสังคมและองค์ความรู้ทางด้านการส่งเสริมสุขภาพ*