

The Level of Knowledge, Attitude and Practice of Healthy Lifestyle among the University Students in Kedah/Perlis

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ABSTRACT

This study was conducted to enquire the level of knowledge, attitudes and practices of healthy lifestyles among students in Public Institutions of Higher Learning (IPTA) in Kedah and Perlis particularly at Universiti Malaysia Perlis (UniMAP), Universiti Teknologi Mara (UiTM) Perlis branch and Universiti Utara Malaysia (UUM). Data were collected from 422 students consists of 272 students of Universiti Malaysia Perlis (UniMAP), 87 students of Universiti Utara Malaysia (UUM) and 63 students of the University Teknologi Mara (UiTM) Perlis branch using a questionnaire that was adapted from Burton (1999). In general, the study shows that students in the UniMAP, UUM and UiTM possessed an adequate level of knowledge about healthy lifestyle. In addition, respondents also have a positive attitude towards the practice of healthy lifestyle.

Keywords: Knowledge, attitudes, practices, healthy lifestyles

1. INTRODUCTION

World Health Organization (WHO, 1948) defines health as a state of physical, mental and social health, smart, fitness and free from any disease. This definition emphasizes that the health status was based by the well-functioned physical, mental and social, health and fitness and not be threatened by disease that causes harm to humans. Health is the key to human welfare. A healthy person can definitely play an active role towards the development of religion, race and nation. The aspect of health was one of the main focuses of Malaysian government. The Government has launched the Healthy Lifestyle Campaign in 1996 which aims to improve the knowledge and the practice of healthy lifestyle among Malaysians (UPEN, 1999). There are four main focuses of this campaign which are: (1) Diabetes Prevention Campaign (1996), (2) Promotion of Healthy Eating Campaign (1997); (3) Promotion of Exercise and Fitness Campaign

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(1998), and (4) PROSTAR Campaign (1999) (UPEN, 1999). These programs seem to be effective as proven by reports from the Malaysian Department of Statistics (2004), the reports show that the lifespan of Malaysian citizen had increased from 73 years in 2000 to 75 years in 2004.

2. THE CONCEPT OF HEALTHY LIFESTYLE

The concept of a healthy lifestyle is a campaign of government's aspiration to create a healthy, smart, fitness, prosperous and free from any diseases that caused by sedentary lifestyles. Healthy lifestyle includes optimal living habits in daily life, such as appropriate and adequate physical activities, practicing right eating habits, having enough rest and having a positive attitude towards life situations (Nordin & Roziah, 2001). The main targets of this campaign are the citizens of Malaysia, especially teenagers and students at institutions of higher learning (IPT). There are four main components that form the based of this concept of a healthy lifestyle, which are (1) increased of knowledge and dietary practices, (2) increased of knowledge and practices regarding stress, (3) increased of knowledge and anti-smoking practice, and (4) increased of knowledge and the practice of sport and recreation. However, the effectiveness of this campaign to promote health among the people of Malaysia still is in doubt. The lack of research specifically in evaluating the effectiveness of the campaign in addition to the increasing number of hypo kinetic patients proves that the effectiveness of the campaign is still questionable (Malaysian Department of Statistics, 2004).

There are international studies that found out that although the level of knowledge of the world's population about healthy lifestyle have increased, but it was not fully practiced in our daily lives and it has resulted to many diseases (Farooqi, Nagra, Edgar, & Khunti, 2000). Various research findings related to physical activity and its impact on health have shown that health risks faced by the publics have been decreased through active involvement of physical activity in everyday life (Stuart & Davis, 1972). United States Department of Health and Human Services (1996) reported that the level of activity and fitness were significantly higher among adult and adolescent populations. Studies on adolescents in developed countries such as the United States have found that about 50 percent of the population of youth that were actively engage in exercises and participated in physical education classes in schools continues to decline (Stone, McKenzie, Welk, & Booth, 1998). Exercises and activities are very important in human life. The involvement in exercises and physical activities will benefit the individuals in terms of psychological, physiological and epidermi ological (Braunstein, 2000).

Cultural differences are also served as an important role in individuals' involvement in exercise and physical activities because it gives a different

perception and motivation towards individuals (Johnson, 2000). Markland and Hardy (1993) in their study using the *Exercise Motivation Inventory* reported on the involvement of women in the exercise and physical activities were characterized by the intelligence and weight control, while men are more likely into competitive situations and personal development.

Mourey and McGinnis (2003) have investigated the Wheeling Walks Health Education campaign as well as Media Campaign which aim to encourage communities to engage actively in sports and recreational activities especially for health care. The findings showed that over 90 percent of the communities involved in this program, unfortunately, only 14 percent of them continuously practiced it in everyday life. While Males and Kerr (1996) through the study on stress levels found out that individual who have higher position or academic level has a higher level of stress than people who are less educated. The findings also indicated that many respondents did not have the proper knowledge to cope with stress.

Nasution (2000) stated that the prolonged stress will disrupt life patterns of individuals and their health may be affected. In addition to impacts on health, stress also has a negative impact on the decline in athlete's performance (Davies, 1989, Kerr & Leith, 1993, Kerr & Svebak, 1994, Kerr & Van-Schaik, 1995). Douglas and Douglas (1984) have conducted a study of 943 university athletes in Connecticut and found that female have a better knowledge on the diet than the male. However, male have better dietary practices compared to female. The study by Thatcher and Rhea (2003) also found that the mass media, family and peers are a major influence on the student eating habits.

McMahan, Hampl, and Chikamoto (2003) have conducted a study on knowledge and dietary practices among university students in the United States. The findings indicated that there was an increase in dietary knowledge among university students compared to the study done in 1971. But there are many students who do not utilized the knowledge in their daily practice. Aldinger, Dawood, Hanson, Lee and Rinaldi (1999) found that their findings have shown that higher levels of knowledge about the dangers of smoking among college students does not stopping their smoking habit. Wechler, Rigotti, Gleduill, Hoyt, and Lee (1998) also reported an increase of 28 percent among the number of college students who are smoking from the year 1993-1997. It is also found that over a third of new college students have the smoking habits.

Reader, Carter, and Crawford (1998) examined the knowledge and attitudes toward smoking among students of Exeter University in England (n=98) by using questionnaires. Findings showed that respondents had more knowledge on the dangers of smoking. However, this knowledge was not practiced in their daily lives. Wetter, Goldberg, King, Sigmant-Grant, & al (2001) also stressed that many efforts have been done to increase knowledge and public practice of the

United States on dietary practices, sports and recreation. Unfortunately, this knowledge was less practiced in everyday life. Similar findings have been reported in the study by Morrow, Krzewinski-Malone, Jackson, Bungum, & Fitzgerald (2004). Based on a common finding among studies above, Rudd and Glanz (1990) concluded that knowledge does not play a big role towards the formation of a healthy lifestyle.

The literature review revealed a significant increase in knowledge among the public about the importance of a healthy lifestyle. However, such knowledge was not practiced in our daily lives and leads to continuing threat of health risks. In addition, there are not many studies conducted in Malaysia in order to identify the knowledge, attitude and practice of healthy lifestyle among Malaysians. Because of that, a study should be conducted among the Malaysian to answer the following questions:

- 1.1 To what extent the level of knowledge on healthy lifestyles among university students in Kedah and Perlis?
- 1.2 To what extent the attitude towards a healthy lifestyle among university students in Kedah and Perlis?
- 1.3 To what extent the practice of healthy lifestyle among university students in Kedah and Perlis?

3. METHODOLOGY

The study was conducted using a questionnaire based on the instrument adapted from Burton (1999). The value of the reliability for this instrument is 0.86. This instrument consists of nine sections: 1) Demographics of Students, 2) Information For Calculation of Body Mass, 3) Dietary Practices Based on the Existing Knowledge and Experience, 4) Exercises Practice Based on Existing Experience and Knowledge, 5) Health Information, 6) Health and Fitness Activity of the Student, 7) Sources of Information, 8) Lifestyle, 9) Attitude towards Health and Lifestyle Practices. Student demographics consists of items related to gender, age, religion, race, education level, year of study, current CGPA, universities and faculties of study. Physical/health status of the student contains information related to the physical information such as height and weight of respondents, and student health information, such as health problems. The part for knowledge of healthy lifestyle consists of 16 questions which includes four items. These items use a scale of four Likert scale; which are strongly disagree, disagree, agree and strongly agree. The section for attitudes towards healthy lifestyle also has eight questions using a scale of four Likert scale, which are never, seldom, often and very often. The part for healthy lifestyle consists of two questions using the Likert scale of three scales, which are never, ever, and still involved. The attitudes towards health practices and lifestyle

consist of 5 questions that include four items. Each item using a Likert scale of four scales, which are strongly disagree, disagree, agree, and strongly agree. Overall scores and subscale for every instruments item have been divided as in Table 1, 2, 3 and 4.

4. RESULTS

The study involved a total of 422 respondents comprised of students from UniMAP (64.5%), UUM (20.6%), UiTM (14.9%). The results showed that the small majority of respondents were female (63%) and they are mostly 19 years old. In terms of ethnicity, most of the respondents were Malays (68%) and Muslims. A total of 72.7 percent of respondents currently undergoing studies at degree level, while 27.3 percent at diploma level. A total of 58.5 percent of the respondents are the first year students. On the average, the performance of these students in terms of CGPA is only 2.9as displayed in Table 1.

Table 1: Demographic Profile (n = 422)

	%
Gender	
Male	37.0
Female	63.0
Age (average)	19
Ethnicity	
Malay	68.0
Chinese	23.0
Indian	3.8
Others	5.7
Religion	
Islam	71.3
Buddhist	23.2
Hindu	3.8
Christian	1.7
University (IPTA)	64.5
UniMAP	20.6
UUM	14.9
UiTM	
CGPA (Average)	2.9

Body mass index is a formula to assess body weight and its relation with height of a person. It was an indirect measurement of body composition because it is associated with the fat available in the body in most individuals. In this study, researchers also reviewed the student Body Mass Index. The results showed in Table 2, the average UniMAP student has a BMI of 21.3 which the normal category. Similarly, the BMI of 20.6 for UUM students shows that they are also in the normal category. Although BMI reading of 24.2 for UiTM students are still in the normal category, but it should not be taken lightly because of there are possibilities towards bad health conditions.

Table 2: Body Mass Index

<i>UniMAP</i>	21.3
UUM	20.6
UiTM	24.2

In general, the study found that respondents' level of knowledge of healthy lifestyle and exercise practice was good. This can be proved in (Table 3) that 52.1 per cent of respondents have a high level of knowledge in healthy lifestyle practice. While 58.1 percent of respondents have a high level of knowledge in the exercises practice. This reflects that the respondents are concerned about the importance of healthy lifestyle and exercises practice that can be used as a motivational factor for them to continuously engage in healthy lifestyle.

Table 3: The respondents' level of knowledge on Lifestyle Practice and Exercise

	Low	Medium	High
Lifestyle Practices	3.6	44.3	52.1
Exercise Practice	3.3	38.6	58.1

Table 4 shows the perception of dietary practices based on the experience and knowledge of the respondents. In general, respondents agreed that always emphasize on the clean food preparation (mean=3.739), taking the fruit as a practice (mean=3.360), taking the breakfast practice (mean=3.338), fiber taking to facilitate the process of digestion (min=3.255) and emphasize a balanced diet (mean=3.111). This suggests that respondents are knowledgeable about the practice of a balanced diet.

Table 4: Dietary Practices Based on the Existing Knowledge and Experience

	SD	D	A	SA	Mean
Giving priority to a balanced diet for each meal	1.9	13	57.1	28.0	3.111
Late night eating habits cause more harm to the body	11.8	19.0	31.3	37.9	2.952
High carbohydrate intake may cause diabetes	7.1	25.1	40.0	27.7	2.883
Taking fruits as a continuous practice	2.1	7.1	43.4	47.4	3.360
Taking breakfast as a practice in life	3.6	8.5	38.4	49.5	3.338
Always emphasize on a clean food preparation is a must	0.2	0.7	23.9	75.1	3.739
Always take the high-fiber foods for better digestion	1.2	9.2	52.4	37.2	3.255
Always consume a boiled food to reduce cholesterol in the body	2.4	24.2	52.6	20.9	2.919

Note: SD Strongly Disagree, D Disagree, A Agree, SA Strongly Agree

Among the practice of healthy lifestyle was engaging in exercise activities. In this study, researchers also reviewed the respondents' views on the exercise practice. Respondents agreed that the exercise will maintain the fitness levels as well as important for heart and brain health (mean=3.547), the practice of exercise to maintain health (mean=3.433), exercise can reduce stress (mean=3.227) and doing household chores such as sweeping as the exercise (mean=3.066). This suggests that respondents believe that the exercise practice contribute to a healthy lifestyle.

Table 5: Knowledge-Based Exercise Practice

	SD	D	A	SA	Mean
Exercises practice as a physical activity to maintain body health	2.1	3.3	43.6	50.9	3.433
Using exercise as a way to reduce stress	2.8	10.2	48.3	38.6	3.227
Exercise to maintain fitness levels as well as important for heart and brain health	0.9	2.4	37.7	59.0	3.547
Doing chores like sweeping and wiping the floor as a substitute for exercises	3.8	14.7	52.6	28.9	3.066

Warming up before sports activities	2.1	7.6	42.7	47.6	3.35
Exercises are done at least 20 minutes three times per week	3.8	13.5	49.5	33.2	3.120
You would prefer to exercise in an open area	7.6	24.2	42.9	25.4	2.860
Always practice the exercises every day	6.6	31.3	49.1	13.0	2.684

Note: SD Strongly Disagree, D Disagree, A Agree, SA Strongly Agree

Table 6 describes the attitude of respondents towards health and healthy lifestyles practice. Overall, respondents have positive attitudes towards health practices. They are willing to spend for health care (mean=3.319), believes that exercising three times a week will prevent disease (mean=3.177), believes the practice of health and dietary will benefit themselves (mean=3.175) and make some time for fitness activities (mean = 3:08).

Table 6: Attitudes towards Health and Lifestyle Practices

	SD	D	A	SA	Mean
I am willing to spend for my health care	1.2	8.5	65.4	24.9	3.319
I am willing to make time for fitness activities	0.7	9.5	70.9	19.0	3.080
I believe that dietary and health practices that I practiced before this will benefit myself	0.2	8.8	64.2	26.8	3.175
I am confident that by exercising at least three times a week will prevent disease.	0.7	10.4	59.2	29.6	3.177
I believe that taking supplements does not affect human health.	2.6	14.5	56.4	26.5	3.068

Note: SD Strongly Disagree, D Disagree, A Agree, SA Strongly Agree

Table 7 displays the health and fitness activities. Respondents were asked to state the frequencies in practicing those health and fitness activities. The results showed that only 40.1 percent of respondents taking a balanced diet in their daily lives. While 51.7 percent of respondents had lack of sleep problems; in which they should have 8 hours of sleep. This will be the cause of other health problems such as headaches, high blood pressure and emotional stress. In terms of food supplements, there are only 40.8 percent of respondents who are regularly practiced it. In addition, respondents also evaluated their practices in terms of scheduled medical check-up. The data clearly show that 37 percent of respondents never perform a medical check-up. While only 6.2 percent who realize that the medical check-up is very important to them and they are regularly perform scheduled medical check-up.

Table 7: Health and Fitness Practice

	N	R	O	VO
Balanced food intake	0.9	52.1	40.1	6.9
Adequate Sleep	4.5	51.7	34.6	9.2
Taking health food	5.2	54.0	35.1	5.7
Punctual eating	7.2	60.2	28.0	4.5
Practicing exercises/recreational activities	3.3	63.5	27.0	6.2
Scheduled Medical Check-up	37.0	56.9	4.5	1.7
Personal hygiene (clothes)	-	2.6	36.3	61.1
Personal Grooming	1.9	15.2	42.4	40.5

Note: N Never, R Rarely, O Often, VO Very Often

5. CONCLUSION

The practice of healthy lifestyle is a very good activity to be practiced by every individual. It is because the benefit from a healthy lifestyle practice does not only improve the quality of physical health, but it also continuously benefits both mentally and emotionally. The findings indicated that in general the health quality of the respondents were generally at the good level. Respondents also have good knowledge about healthy lifestyle and the needs of exercise activities in their life. They also have a positive attitude in a healthy lifestyle practice. Meanwhile for the healthy lifestyle activities, the results of the study showed that the respondents often practiced healthy lifestyle activities. This suggests that the majority of students aged between 19-20 years have known that healthy lifestyle will benefit them. Students are also the heirs of the future leadership. Once the practice of health and healthy lifestyles are not practiced it will cause a negative impact on quality of life and also affects the country as students are the most important national asset and very valuable to the future leadership.

REFERENCES

- Braunstein, L., (2000), *Psychological factors in competitive sport*. London: Burgess Science Press.
- Clifford, L. Johnson, (2000), *Prevalence and Trends in Obesity Among US Adults, 1999-2000*.
- Darus, N. & Omar, R. (2001), *Pendidikan Jasmani dan Kesehatan 4 & 5*, Volume 1, Selangor. Citra Publishing Sdn. Bhd.

- David Markland & Hardy. L., (1993), Variations in Self-Determination Across the Stages of Change for Exercise in Adults. *Journal of Motivation & Emotion*, 21(4), 349-362.
- Douglas, P.D., & Douglas, J.G. (1984). Nutrition knowledge and food practices of high school athletes. *Journal of the Nutrition Education*, 84, 120-125.
- Farooqi, A., Nagra, D., Edgar, T., Khunti, K. (2000). Attitudes to lifestyle risk factors for coronary heart disease amongst South Asians in Leicester: A focus group study. *Health and Medical Complete*, 17(4), 293-297.
- Jabatan Perangkaan Malaysia. (2004). *Buku Tahunan Perangkaan 2004*. Kuala Lumpur: Percetakan Nasional Berhad.
- Kerr, J. H., & Leith, L. (1993). Stress management and athletic performance. *The sport Psychologist*, 7, 221-231.
- Kerr, J. H., & Svebak, S. (1994). The acute effects of participation in sports on mood. *Personality and Individual Differences*, 16(1), 159-166.
- Kerr, J. H., & Van-Schaik, P. (1995). Effects of game venue and outcome on psychological mood states in rugby personality and individual differences. *Journal of Psychological Mood*, 19(3), 407-409.
- Males, J. R. , & Kerr, J.H.(1996). Stress, emotional performance in elite slalom canoeists. *The Sport Psychologist*, 10, 36-40.
- McMahan, S., Hampl, J., & Chikamoto, Y. (2003). A "fat tax": Knowledge and attitudes of snack food taxing among college students. *American Journal of Health Education*, 34(6), 329-334.
- Mohd Majid Konting (2000). *Kaedah penyelidikan pendidikan*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Morrow, J. R., Jackson, A.W., Bazzarre, T.L., Milne, D., & Blair, S.N.(1999). A one year follow-up to Physical Activity and Health: A Report of the Surgeon General: What American about physical activity and disease. *American Journal of Preventive Medicine*, 17(1), 24-31.
- Morrow, J.R., Krzewinski-Malone, J.A., Jackson, A.W., Bungum, T.J., & Fitzgerald, S.J. (2004). American adults' knowledge of exercise recommendations. *Research Quarterly for Exercise and Sports*, 75(3), 231-237.

- Mourey, R. L., & McGinnis, J.M. (2003). Making the case for active living communities. *American Journal of Public Health*, 93(9), 1386-1389.
- Nasution, Y. (2000). Sumber stress bagi atlit pelajar. *Departemen Pendidikan Nasional Republik Indonesia*, 14, 23-30.
- Reader, E. G., Carter, A., & Crawford, A. (1998). Smoking, knowledge, attitudes and behaviours: A study with university student. *Health Education Journal*, 47, 125-127.
- Rudd, J., & Glanz, K. (1990). How individuals use information for health action: Consumer information processing. In K. Glanz, F. Marcus-Lewis & B. K. Rimer (Eds), *Health behaviour and health education: Theory research and practice* (pp. 115-139). San Francisco: Joey-Bass.
- Stone, E. J., McKenzie, T. L., Welk G.J. & Booth, M. L. (1998). Effects of physical activity interventions in youth: Review and synthesis. *American Journal of Preventive Medicine*, 15, 298-315.
- Stuart, R. B., & Davis, B. (1972). *Slim chance in a fat world*. Champaign, IL: Research Press.
- Thatcher, W., & Rhea, D. (2003). Influences of body image and disordered eating among secondary school students. *American Journal of Health Education*, 34 (6), 343-350
- Unit Perancangan Ekonomi Negara. (1999). *Kajian separuh penggal Rancangan Malaysia Ketujuh: 1996-2000*. Kuala Lumpur: Percetakan Nasional Berhad.
- The Journal of the American Medical Association*, 288, 1723-1727.
- Unit Perancangan Ekonomi Negara. (2001). *Rancangan Malaysia Kelapan: 2001-2005*. Kuala Lumpur: Percetakan Nasional Berhad
- U.S Department of Health and Human Services. (1996). *Physical activity and health: A report f Surgeon General*. Atlanta: Author.
- Wechler, H., Rigotti, N.A., Gleduill, Hoyt, J., & Lee, H. (1998). Increased level cigarette use among college students. *Journal of American Medical Association*, 280(19). 1673-1678.
- Wetter, A. C., Goldberg, J. P., King *et al* (2001). How and why individuals make food and physical activity choices. *Nutrition Reviews*, 59(3), 11-20.