SCHOOL STUDENTS' PERCEPTION ON RISKY BEHAVIOR AND THEIR UTILIZATION OF HEALTH CARE SERVICES

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Abstract

The Malaysia Ministry of Health reported adolescents' low utilization of healthcare services, although they need this service as a consequence of their involvement in risky behavior. This cross-sectional study aimed to determine adolescents' perception on risk taking behavior and their utilization of health care services. A modified self-administered questionnaire was used to collect data from 250 secondary school students aged 13 and 14 years in one of the selected schools in Malacca, Malaysia. Data were analyzed using SPSS 20. Fast food consumption, loitering after school, physical fighting, smoking, and non-use of helmets were the most reported risky behaviors among adolescents in Malaysia. More than half of the adolescents who knew about health care services had a positive perception on their utilization of such services. Thus, the promotion of adolescents' health services helps increase their use of these services and consequently achieve a healthy lifestyle.

Keywords: adolescent health care services, risky behavior, schools

Abstrak

Persepsi Siswa Sekolah terhadap Perilaku Risiko dan Pemanfaatan Layanan Perawatan Kesehatan. Kementerian Kesehatan Malaysia melaporkan rendahnya pemanfaatan layanan kesehatan oleh remaja, meskipun mereka membutuhkan layanan ini sebagai konsekuensi dari keterlibatan mereka dalam perilaku berisiko. Studi cross-sectional ini bertujuan untuk mengetahui persepsi remaja tentang perilaku pengambilan risiko dan pemanfaatannya terhadap layanan perawatan kesehatan. Kuesioner mandiri yang dimodifikasi digunakan untuk mengumpulkan data dari 250 siswa sekolah menengah berusia 13 dan 14 tahun di salah satu sekolah yang dipilih di Malaka, Malaysia. Data dianalisis menggunakan SPSS 20. Konsumsi makanan cepat saji, berkeliaran sepulang sekolah, perkelahian fisik, merokok, dan tidak menggunakan helm adalah perilaku berisiko yang paling banyak dilaporkan di kalangan remaja di Malaysia. Lebih dari setengah remaja yang tahu tentang layanan perawatan kesehatan memiliki persepsi positif tentang pemanfaatan layanan ini dan akibatnya mencapai gaya hidup sehat.

Kata Kunci: layanan perawatan kesehatan remaja, perilaku berisiko, sekolah

Introduction

The World Health Organization categorized individuals as adolescents when their age ranges between 10 and 19 years. Adolescence is a crucial development period characterized by marked physical, emotional, and intellectual changes and changes in social roles, relationships, and expectations. All these changes are important because they provide a foundation for functioning as adults and individuals. At this stage, adolescents are prone to taking risky behaviors, such as smoking, aggressive and impulsive behaviors, alcohol consumption, sexual relationship, depression, anorexia and bulimia, and others (Choo & Sim, 2010). Hence, the development of healthy adolescents is complex, and their evolving process requires collaborations from various aspects, such as supportive and caring families, peers, and communities; access to high-quality health services; and opportunities to engage and succeed in developmental tasks of adolescents. Adolescents' attitudes, behavior, and use of health care systems are directly linked to their health and well-being as adults (Hamid, 2018).

Adolescents tend to participate in risk taking behaviors, including racing, using illicit drugs, engaging in unprotected sexual activities, and exhibiting aggressive behaviors, which can result in injury and fatality. The influence of media and the Internet is one of the major factors that contribute to sexual risky behaviors (Jones et al., 2014). Studies have shown that sexual and reproductive education does not lead to sexual activity among adolescents; instead, it helps delay their first sexual intercourse because they are aware of the consequences of having unintended pregnancy. It can also reduce the incidence of abortion (Rahman et al., 2011).

In Malaysia, sexual and reproductive health is delivered informally to Malaysian adolescents in schools. Furthermore, Rahman et al. (2011) reported that Malaysian adolescents have limited knowledge on sexual health topics. Recent news about gangsterism and bullying has also increased. The lack of life skills among adolescents contributes to other social problems, such as juvenile delinquency and bullying in schools. Some school children taking drugs and consuming alcohol have been reported. Without correct information and skills to cope with growth to adulthood, some adolescents may experiment with drugs and engage in unprotected sex, thereby increasing their risk of unwanted pregnancies and contracting HIV, hepatitis, and other sexually transmitted diseases (Chandra-Mouli & Patel, 2017). Therefore, governments and private sectors should cooperate to reduce this bad characteristic of adolescents by enforcing rules and regulations (Chandra-Mouli et al., 2013). A strategic approach is also required to empower adolescents and help them benefit from their involvement in program planning.

Methods

This quantitative cross-sectional study was conducted in one of the selected secondary schools in Malacca. The mean age of secondary school students was between 13 and 17 years old. According to the Ministry of Education, any research involving students should not include those in the national examination year. Therefore, 250 adolescents aged 13 and 14 years and who fulfilled the inclusion criteria were recruited for this study. A modified self-administered questionnaire was distributed to eligible adolescents in a hall, and their written consent was obtained. The students were instructed to answer the questionnaire divided into four parts. It covered demographic profile, involvement in risky behavior, knowledge on adolescent health care services in terms of human papillomavirus vaccination and nutritional intake, and their perception on adolescent health services. This questionnaire was adapted from Risky Behavior Questionnaire Adolescent (involvement in risky behavior), PSQ-18 (perception section), Vaccine Survey Georgia Department, and Nutrition Education Survey California (knowledge on health services in terms of HPV vaccination and nutritional intake). A pilot study was conducted among 30 teenagers to test their complete understanding about the questions and ensure reliability. Cronbach's alpha was 0.81, which corresponded to a good outcome (Taber, 2018).

Approval was obtained from the school principal and the ethics committees of Kulliyyah of Nursing, International Islamic University Malaysia, Ministry of Education, and Melaka State Education Department. In this research, the confidentiality and anonymity of the participants were ensured by obtaining consent attached with the questionnaire.

Results

Table 1 shows the demographic profile data of the participants. The number of male students was more than that of female students.

Variable	Frequency (n)	Percentage (%)
Gender		
Male	133	53.2
Female	117	46.8
Race		
Malay	200	80.0
Chinese	23	9.2
Indian	27	10.8
Age		
13	122	48.8
14	128	51.2
Household income		
<rm1000< td=""><td>52</td><td>20.8</td></rm1000<>	52	20.8
RM1000-RM5000	164	65.6
>RM5000	34	13.6
Parent education level		
Primary	6	2.4
Secondary	127	50.8
Tertiary	117	46.8

Table 1. Demographic Profile Data of the Participants (n= 250)

Table 2. Adolescents' Perception on the Utilization of Health Care Services (n= 250)

	Mean	Range	Minimum	Maximum	Standard Deviation
Perception	27.81	18	17	35	3.27



Total score of 7-35

Figure 1. Types of Risky Behavior Among Adolescents (n= 250)

Table 3. Knowledge on HPV Vaccination (n=250)

Questions	Frequency (n)	Percentage (%)
1. Do you know that HPV is the main cause of cervical cancer?	133	53.2
2. By receiving an HPV vaccine, it can protect against HPV.	199	79.6
3. HPV vaccine is safe and does not give any side effects.	168	67.2
4. HPV vaccine consists of three shots over a 6-month period.	162	64.8
5. The vaccine can protect people around me.	94	37.6
6. HPV vaccine is given to both males and females.	57	22.8

Table 4. Knowledge Regarding Healthy Nutritional Intake (n= 250)

Questions	Frequency (n)	Percentage (%)
1. Drinking eight glasses of water can ensure the health and fitness of the body.	247	98.8
2. To have a healthy body, we should avoid fatty food.	229	91.6
3.A healthy diet should contain a balanced proportion of carbohydrates, proteins, fibers, and fats.	246	98.4
4. Fruits and vegetables can provide good and beautiful skin.	244	97.6
5. Carrots can strengthen our bones.	81	32.4
6. Fat is not important for a healthy body.	50	20.0

Table 5. Association Between Knowledge and Perception on Adolescent Health Services (n= 250)

Variables	Perception	
Knowledge	0.132ª	
-	(0.037) ^b	

a = Pearson correlation coefficient

b = p-value

Table 2 presents the perception of adolescents on their health services. The mean score was 27.81 with SD 3.27, and the range of score was 18, with a minimum score of 17 and a maximum score of 35. About 62.4% of the participants scored above the mean score, reflecting that they had a positive perception on adolescent health services.

Risky behavior among adolescents. Figure 1 shows the types of risky behavior between male and female adolescents and their percentage. Male and female adolescents had the highest percentage in fast-food consumption with 80% and 79.1%, respectively. Males were more prone to having a risky behavior than females.

Adolescents' knowledge on health care services

Knowledge on HPV vaccination. Table 3 presents the frequency and percentage of adolescents' knowledge on HPV vaccination. The participants realized that HPV vaccine is safe and helpful in preventing cervical cancer. They also learned that this vaccine is composed of three shots. Only 22.8% of them were not aware that HPV vaccine is given only to female adolescents in Malaysia.

Knowledge on nutritional intake. Table 4 presents the frequency of the knowledge on nutritional intake. The majority of the participants (98.9%) understood that consuming eight glass-

es of water could favor a healthy body. Overall, the participants were aware of a healthy diet, including fruits (98.4%) and and vegetables (97.6%). Few participants were poorly knowledgeable on the benefits of carrots and the function of fat in their body.

Association between knowledge and perception on adolescent health services. Table 5 represents the association between knowledge and perception on adolescent health services. The p-value was 0.037 (p< 0.05) with a correlation coefficient of r= 0.132. This study found that knowledge had a weakly positive association with perception on adolescent health services. Therefore, this finding demonstrated that knowledgeable adolescents had a high perception on adolescent health services.

Discussion

Most of the participants were Malay, came from moderate-income families, and had parents with formal education. No study has been conducted nationally or internationally to describe a definitive line between positive and negative perceptions on adolescent health services. High mean scores indicate a positive perception on adolescent health services (Roncoroni et al., 2013). Our findings show the mean score of the perception on adolescent health services was 27.81 ± 3.27 . This result was comparable with that of Mauerhofer (2010), who found that 94% of female adolescents are satisfied with adolescent health services in Switzerland. However, adolescents' involvement in risky behavior was alarming. We found that males were more exposed to risky behavior than females, and this result supported the finding of Hamid and Nawi (2013), who reported that Malaysian male adolescents are three to four times more likely to be involved in multiple risky behaviors. Our result was also comparable with that of Fox et al. (2013), who demonstrated that male adolescents have a high prevalence of being involved in more than one type of risky behavior. This phenomenon may be attributed to the anger and rage felt by male adolescents and their being victims of bullying.

The majority of the participants had good knowledge about HPV vaccination. More than half of them knew that HPV is the main cause of cervical cancer, it can protect against HPV, it is safe, and it consists of three shots over a 6-month period. The knowledge on HPV vaccination in this study was similar to that described by Al-Naggar et al. (2012), who pointed out that about 69% of adolescents in Melaka have knowledge on HPV vaccination, and this value is higher than their previous findings (51.5%). This result showed that the knowledge of Malaysian adolescents has enhanced because the government has heavily promoted vaccination through campaigns and media. However, Rashwan et al. (2011) in Sarawak revealed that 61.8% of adolescents have poor knowledge on HPV. Differences in results might be due to different questionnaires used and study settings.

Our result revealed the good knowledge on nutritional intake among adolescents. More than half of them knew the importance of drinking eight glasses of water per day, the balanced proportion of a healthy diet, eating fruits and vegetables, and avoiding fatty and oily foods. However, some of the respondents did not know about the importance of fats to the body. Vereecken et al. (2015) claimed that there was a significant increase in the vegetable and fruit consumption in adolescent in 18 countries between 2002 until 2010. These results suggested that adolescents in developed and developing countries have basic understanding on healthy nutritional intake. Similarly, in the United States, adolescents do not understand the benefit of fat to their body because they assume all fats are bad (Harrison, 2000). Overall, this finding emphasized that adolescents had good knowledge about nutritional intake.

The association between demographic profile factors and perception on adolescent health services was examined in this study. Our findings showed that age, gender, and race were not associated with perception on adolescent health services. However, Abajobir and Seme (2014) suggested that age is significantly related to the utilization of adolescent health services, particularly reproductive health services. This result might be due to different environments and accessibilities to adolescent health services. In Malaysia, the government has enforced the entire adolescents in government schools to be included in services because they are free.

The expected association between knowledge and perception on adolescent health services was observed; that is, knowledge had a weakly positive correlation with perception on adolescent health services. This result indicated that adolescents with high knowledge had a positive perception on adolescent health services. Violita and Hadi (2019) supported this finding and indicated that knowledge is significantly associated with perception on adolescent health services (x^2 = 10.9 and p= 0.004). Both studies successfully demonstrated that having knowledge can affect the perception of adolescents on health services.

Conclusion

In this study, the perception on adolescent health services is identified. Adolescents' perception on health services should be determined because understanding their perception can further improve health care delivery. This study also aims to identify risky behavior, especially among early adolescents, because early identification is crucial, considering that "prevention is better than cure." Age, gender, and race do not affect adolescents' perception on health services. Therefore, knowledgeable adolescents have a positive perception on health services.

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References

- Abajobir, A.A., & Seme, A. (2014). Reproductive health knowledge and services utilization among rural adolescents in east Gojjam zone, Ethiopia: A community-based cross-sectional study. *BMC health services research*, 14 (1), 1–11. doi: 10.1186/1472-6963-14-138
- Al-Naggar, R.A., Bobryshev, Y.V., Al-Jashamy. K. & Al-Mousli, M. (2012). Practice of HPV vaccine and associated factors among school girls in Melaka, Malaysia. *Asian Pacific Journal Cancer Prevention*, 13 (8), 3835– 3840. doi: 10.7314/apjcp.2012.13.8.3835
- Chandra-Mouli, V., Mapella, E., John, T., Gibbs, S., Hanna, C., Kampatibe, N., & Bloem, P. (2013).
 Standardizing and scaling up quality adolescent friendly health services in Tanzania. *BMC Public Health*, 13 (1), 579. doi: 10.11 86/1471-2458-13-579
- Chandra-Mouli, V., & Patel, S. V. (2017). Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low- and middleincome countries. *Reproductive Health*, *14* (1), 30. doi: 10.1186/s12978-017-0293-6
- Choo, H., & Sim, T. (2010). Health risk behaviours of foreign-born adolescents in Singapore: Exploration of risk factors in an Asian context. *British Journal of Social Work, 40* (7), 2203–2222. doi: 10.1093/bjsw/bcp160
- Fox, H.B., McManus, M.A., & Arnold, K.N. (2010). Significant multiple risk behaviors among US high school students. *The National Alliance to advance adolescent health*. Retrieved from https://www.thenationalallia nce.org/publications/2017/7/23/significant-m ultiple-risk-behaviors-among-us-high-school -students
- Hamid, S.H.B.A., & Nawi, A.B.M. (2013). Family characteristics associate with risk taking behaviour among urban and rural adolescents in two districts in Selangor: A comparative study. *Procedia - Social and Behavioral Sciences*, 91, 581–587. doi: 10.1016/j.sbspro. 2013.08.457

- Hamid, S.H.B.A. (2018). Exploring the views and experiences of primary healthcare professionals who deliver sexual and reproductive services to unmarried adolescents in Malaysia (Unpublished Thesis). The University of Manchester.
- Harrison, K. (2000). The body electric: Thin-ideal media and eating disorders in adolescents. *Journal of Communication*, *50* (3), 119–143. doi: 10.1111/j.1460-2466.2000.tb02856.x
- Jones, K., Eathington, P., Baldwin, K., & Sipsma, H. (2014). The impact of health education transmitted via social media or text messaging on adolescent and young adult risky sexual behavior: A systematic review of the literature. *Sexually Transmitted Diseases*, 41 (7), 413–419. doi: 10.1097/OLQ.000000000 0000146
- Mauerhofer, A. (2010). Female adolescents' views on a youth-friendly clinic (Doctoral dissertation, Université de Lausanne, Faculté de biologie et médecine). Retrieved from https:// serval.unil.ch/resource/serval:BIB_ACA8A E772464.P001/REF.pdf
- Rahman, A.A., Rahman, R.A., Ibrahim, M.I., Salleh, H., Ismail, S.B., Ali, S.H., ... & Ahmad, A. (2011). Knowledge of sexual and reproductive health among adolescent attending school in Kelantan, Malaysia. Southeast Asian Journal Tropical Medical Public Health, 42 (3), 717–725. PMID: 21706952

- Rashwan, H., Lubis, S.H., & Ni, K.A. (2011). Knowledge of cervical cancer and acceptance of HPV vaccination among secondary school students in Sarawak, Malaysia. *Asian Pac J Cancer Prev, 12* (7), 1837–41. PMID: 2212 6576
- Roncoroni, J., Tucker, C.M., Wall, W., Nghiem, K., Wheatler, R.S. & Wu, W. (2013). Patient perceived cultural sensitivity of clinic environment and its association with patient satisfaction with care and treatment adherence. *American Journal of Lifestyle Medicine*, 8 (6), 421–429. doi: 10.1177/1559827614521 760
- Taber, K.S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48 (6), 1273–1296. doi: 10.1007/s11165-016-9602-2
- Violita, F., & Hadi, E.N. (2019). Determinants of adolescent reproductive health service utilization by senior high school students in Makassar, Indonesia. *BMC Public Health*, 19 (1), 1–7. doi: 10.1186/s12889-019-6587-6
- Vereecken, C., Pedersen, T.P., Ojala, K., Krølner, R., Dzielska, A., Ahluwalia, N., Giacchi, M., & Kelly, C. (2015). Fruit and vegetable consumption trends among adolescents from 2002 to 2010 in 33 countries. *The European Journal of Public Health*, 25 (suppl 2), 16– 19. doi: 10.1093/eurpub/ckv012