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ARAŞTIRMA / RESEARCH

Knowledge and attitudes of health-based students in a public university in Malaysia on hepatitis B infection

Malezya'da bir devlet üniversitesindeki sağlık öğrencilerinin Hepatit B enfeksiyonuna yönelik bilgi ve tutumları

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Abstract

Purpose: This study was intended to assess the knowledge and attitude of health-based students regarding HBV infection, its associated factors and the relationship between the knowledge and attitude.

Materials and Methods: This study was a cross-sectional study. The data had been collected from the students selected through convenience sampling in a public university in Malaysia using a self-administered questionnaire.

Results: Among the 117 student respondents, nearing half (44.4%) had adequate knowledge related to HBV infection and nearing fourth-fifth (78.6%) had attitude score of satisfactory level. Genders and community status showed no association with knowledge and attitude regarding HBV infection, while faculty was significantly associated with both knowledge and attitude. Only knowledge but not attitude was found to have significant positive correlation with age and year of study. Knowledge was also found to be positively correlated with attitude regarding HBV infection.

Conclusion: This research found that age and year of study were only positively correlated with knowledge regarding HBV, but not attitude. Besides, the result showed significant positive correlation between knowledge and attitude regarding HBV infection, meaning higher knowledge was associated with higher attitude.

Keywords: Knowledge, attitude, practice, hepatitis B infection, university students, Malaysia.

Öz

Amaç: Bu çalışma HBV enfeksiyonu, ilişkili faktörler ve bilgi ve tutum arasındaki ilişki üzerine sağlık temelli öğrencilerin bilgi ve tutumlarını değerlendirmeyi amaçlamıştır.

Gereç ve Yöntem: Bu çalışma kesitsel bir çalışmadır. Veriler, Malezya'da bir kamu üniversitesinde kendi kendine uygulanan bir anket kullanılarak uygun örnekleme yoluyla seçilen öğrencilerden toplanmıştır.

Bulgular: Araştırmaya katılan 117 öğrencinin yarısına yakını (%44.4) HBV enfeksiyonu ile ilgili yeterli bilgiye sahipti ve dördüncü beşe yakın (%78.6) tatmin edici düzeyde tutum puanına sahipti. Cinsiyetler ve toplum statüsü, HBV enfeksiyonu ile ilgili bilgi ve tutum ile hiçbir ilişki göstermezken, öğretim üyeleri hem bilgi hem de tutum ile önemli ölçüde ilişkiliydi. Sadece bilgi değil, tutumun yaş ve çalışma yılı ile anlamlı derecede pozitif olduğu bulunmuştur. Ayrıca bilginin HBV enfeksiyonu ile ilgili tutum ile pozitif ilişkili olduğu bulunmuştur.

Sonuç: Bu araştırma, yaş ve çalışma yılı ile HBV ile ilgili olarak sadece tutum ve tutum arasında pozitif bir ilişki ve tutum olduğunu bulmuştur. Ayrıca, sonuç, HBV enfeksiyonuna ilişkin bilgi ve tutum arasında anlamlı pozitif korelasyon olduğunu, daha yüksek bilgi ile daha yüksek bir tutuma bağlı olduğunu göstermektedir.

Anahtar kelimeler: Bilgi, tutum, uygulama, hepatit B enfeksiyonu, üniversite öğrencileri, Malezya.

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INTRODUCTION

Hepatitis is an infection which can be caused by a number of different types of viruses. However, there are three types of common hepatitis that occur in Malaysia which are hepatitis A, B and C. In this study, the focus will be on hepatitis B infection because although each type of hepatitis can cause similar symptoms, the modes of transmission and the effects on the liver are different. Hepatitis A is an acute infection and does not become chronic. Hepatitis A patient usually can heal without treatment while hepatitis B virus (HBV) and hepatitis C virus can cause acute and chronic infections. There is no vaccine for hepatitis C, but vaccines are available for hepatitis A and B[1]. Besides, HBV infection is one of the top ten leading causes of death around the world[2]. In Malaysia, more people were infected with HBV, which is about 75% of all types of viral hepatitis[3,4]. In Malaysian general population, the seroprevalence of HBV surface antigen is considered to be moderate at a rate of 1.5 – 9.8%, with about one million people were estimated to be chronically infected with the disease[3]. The prevalence of HBV infection in Malaysia showed a steady reduction from 1990 to 1997 due to the vaccination given to all newborn babies, but higher prevalence were noted afterwards because of the inclusion of mandatory testing for HBV infection among all foreign workers coming into Malaysia[3].

HBV can be transmitted through direct contact of blood and body fluid contact, mother to child and by exposure to needle sticks or sharps injury in the job.[5] HBV infection often develops serious complications due to the development of chronic infection; such as chronic hepatitis, cirrhosis, liver failure, and liver cancer[6] Chronic HBV infected patients often remain asymptomatic and may not be aware or known as carriers[7]. Patients with chronic HBV infection have one-hundred times more possibility to develop liver cancer compared to those who are not[8]. Furthermore, "*chronic HBV infection results in significant liver-related mortality; however, carriers retain a satisfactory life expectancy*"[9].

In future, most of the health-based students, such as those from the programmes of Medicine, Dentistry, Nursing, Pharmacy and Allied Health Sciences, will be working in health care delivery system and might be exposed to the same risk as the current health workers when they are in contact with infected patients or contaminated instruments[10]. It is obvious during clinical years or practical sessions, they are expected to deal with infected patients. There are very few studies have been conducted to find out the knowledge, attitude and practice (KAP) of health-based students about HBV in Malaysia. The socio-demographic factors might affect the KAP regarding HBV infection.[11] Additionally, practice leads to prevention of the HBV infection.[12,13] This study intended to assess the knowledge and attitude of health-based students towards HBV transmission and prevention in a public university in Malaysia, including the socio-demographic factors associated with the knowledge and attitude and the association between knowledge and attitude regarding HBV infection.

MATERIALS AND METHODS

The study was carried out in a public university in Malaysia with health-based faculties. The survey targeted population were students from health-based faculties in the university, namely Dentistry, Science, Pharmacy, Allied Health Sciences, Medicine and Nursing. Every university student must have early exposure to some knowledge on diseases related to their future job sectors, especially those engaged in medical and health sectors.[14] This study used a cross-sectional study design. Informed written consent was asked from all respondents before they answered the questionnaire for data collection. Moreover, the information and personal details were kept confidential. The approval for the study protocol was obtained from the Faculty of Allied Health Sciences (Reference No.: IIUM/310/G/13/4/4-180, Dated 11th February 2016).

The sample size was calculated using the single proportion formula to determine the number of respondents needed for this study. Based on 10% of precision with 95% confidence level, 48.4% prevalence of good knowledge and attitude from a previous study[11] and 10% non-response rate, the estimated sample size required for the study was 106. The convenience sampling was used for this study. Inclusion criteria was undergraduate students of both genders from Year 1 until Year 4 of study from all faculties. Exclusion criteria was postgraduate students are excluded because they are not easy to reach, and their population is small compared to undergraduate students. The data had been collected from 117 respondents using a self-

administered questionnaire, which had been used for data analysis. This data collection took place in a month, between March-April 2016.

Table 1. The scoring system for knowledge and attitude regarding hepatitis B

Section	Scale	Score
Knowledge		
Positive statement	True	2
	False	0
	Do not know	1
Negative statement	False	2
	True	0
	Do not know	1
Attitude		
Positive statement	Strongly agree	5
	Agree	4
	Not sure	3
	Disagree	2
	Strongly disagree	1
Negative statement	Strongly disagree	5
	Disagree	4
	Not sure	3
	Agree	2
	Strongly agree	1

Measures

The questionnaire distributed to the respondents comprised of three sections. Generally, the questionnaire developed based on a previous study.[11] The first section asked about the socio-demographic characteristics, followed in section two by questions regarding the general knowledge about HBV infection, which asked about definition, causes, transmission routes, symptoms and the available treatments of HBV infection. The answer choices of this knowledge section were 'true', 'false' or 'do not know'. The third section inquired regarding the attitude of respondents towards HBV infection which reflects their individual perception related to the preventive measures of HBV infection including vaccination. This third section of questions was prepared by using a five-point Likert-scale ranging from 1 to 5, respectively from "strongly disagree" to "strongly agree".

Statistical analysis

Pilot study was done before the actual study to check for the face validity of the questionnaire and the content validity was assessed by the experts in the university. Internal consistency was assessed by Cronbach's alpha which was found to be acceptable (α=0.7). The details of the scoring system are depicted in Table 1. Comparison of knowledge and attitude scores between the different faculties were done using Kruskall-Wallis test. To identify the significant pairs, the post-hoc using Mann Whitney test with the concept of Bonferroni correction for multiple comparison was performed. Bonferroni correction indicated that the significant level for the post-hoc test is to be taken as 0.05 is divided by number of pairs between the faculties which is 15, where 0.05/15 is equal to 0.003. The collected data were compiled, recorded and analyzed by using Statistical Package for Social Sciences (SPSS) version 20.:

RESULTS

The summary of socio-demographic variables of the respondents involved in this study were depicted in Table 2. Among the 117 respondents, there were 49 (41.9%) male and 68 (58.1%) female respondents. The age interval of the respondents was 21-25 years.

Table 2. Socio-demographic characteristics of the respondents (n=117)

Characteristics	Number	%
Gender:		
Male	49	41.9
Female	68	58.1
Faculty:		
Allied Health Sciences	23	19.7
Science	15	12.8
Pharmacy	27	23.1
Dentistry	18	15.4
Medicine	23	19.7
Nursing	11	9.4
Grade of students:		
Year 1	13	11.1
Year 2	21	17.9
Year 3	41	35.0
Year 4	42	35.9
Age:		
20	0	0
21	15	12.8
22	18	15.4
23	43	36.8
24	37	31.6
25	4	3.4
Community type:		
Urban	76	65.0
Rural	41	35.0

Nearing half [44.4% (52)] of the current study respondents had adequate knowledge related to HBV infection and nearing fourth-fifth [78.6% (92)] of them had attitude score on satisfactory level.

Most [98.3% (115)] of the respondents had heard about HBV infection. Among the respondents, 62.4% (73), 59% (69), and 53% (62) of them learned regarding HBV through educational program, internet, and school, respectively. There were 86.3% (101), 88.9% (104), 69.2% (81), 75.2% (88), and 83.8% (98) respondents knew that HBV infection is fatal, a viral disease, not of genetic origin, transmitted through infected patients and spread through blood, respectively. Besides, most of the respondents got correct answers on signs and symptoms of HBV infection, except for the cough and nausea. Additionally, many [68.4% (80)] of the respondents opined that the disease can be treated with antiviral medication. Finally, most [86.3% (101)] of the respondents' definite the idea about vaccination as the prevention method for HBV infection. Most of the respondents answered positively on attitude regarding the prevention of HBV infection. However, 26.5% (31) and 53.0% (62) of respondents were quite confused regarding its transmission through direct contact and that the management of hepatitis is costly, respectively. In addition, 35% (41), 32.5% (38), 53% (62), and 61.5% (672) of the respondents strongly agreed that they would be surprise if they personally infected with HBV, would talk to their friends or relatives about their illness, screening and vaccination for HBV is very important, respectively.

There was no statistical significant differences in comparison of the total knowledge and attitude scores on HBV infection between males and females (p=0.602 and p=0.780, respectively) and similarly no significant differences between urban and rural community types (p=0.625 and p=0.144, respectively), as shown in Table 3.

Table 3. Comparison of total mean knowledge and attitude scores regarding hepatitis B infection between different genders and community types using Independent *t*-test (n=117)

Factors	Mean (SD)		*t-statistics (df)*	*p*-value
Gender	Male (n=49)	Female (n=68)		
Knowledge	68.34 (9.34)	69.30 (10.34)	0.523 (115)	0.602
Attitude	88.97 (9.58)	89.50 (10.13)	-0.280 (115)	0.780
Community type	Urban (n=76)	Rural (n=41)		
Knowledge	69.23 (9.22)	68.29 (10.85)	0.490 (115)	0.625
Attitude	90.26 (8.52)	87.46 (11.87)	1.472 (115)	0.144

Table 4. Knowledge and attitude scores regarding hepatitis B infection between the different faculties

Faculty	n	Median (IQR)	*p*-value
Knowledge			
Medicine	23	55.0 (8.00)	<0.001
Dentistry	18	55.5 (10.0)	
Pharmacy	27	52.0 (13.00)	
Nursing	11	49.0 (10.00)	
Science	15	44.0 (8.00)	
Allied Health Sciences	23	46.0 (10.00)	
Attitude			
Medicine	23	96.0 (8.00)	<0.001
Dentistry	18	93.5 (15.25)	
Pharmacy	27	88.0 (15.00)	
Nursing	11	87.0 (7.00)	
Science	15	87.0 (17.00)	
Allied Health Sciences	23	93.0 (14.00)	

Comparison of knowledge and attitude scores between the different faculties using Kruskall-Wallis test found statistically significant result with p<0.001 for each, meaning at least one pair of the faculties have significant difference in knowledge and attitude regarding HBV infection (Table 4).
To identify the significant pairs, the post-hoc using Mann Whitney test with the concept of Bonferroni correction for multiple comparison was performed. Bonferroni correction indicated that the significant level for the post-hoc test is to be taken as 0.05 is divided by number of pairs between the faculties which is 15, where 0.05/15 is equal to 0.003.

For knowledge, there were three pairs of faculties which showed significant difference from the post-hoc test, namely between the Faculty of Medicine with Science and Allied Health Sciences (p<0.001 each) and between the Faculty of Dentistry and Science (p=0.002). On the other hand, post-hoc test for attitude found only one significant pair, which was between the Faculty of Medicine and Science with p= 0.002.

The scatterplots in Figure 1 and 2 show the association between knowledge with age and year of study, respectively. Pearson correlation test done

indicated that there was a significant linear correlation between knowledge regarding HBV infection with age (p=0.004) and year of study (p=0.012). There positive correlation was fair between knowledge regarding HBV infection and age (r=0.267), while between knowledge and year of study, there was only little positive correlation (r=0.231), meaning as the age and year of study is higher, the knowledge scores are also higher.

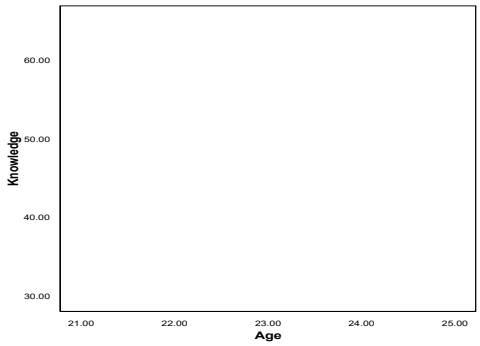

Figure 1. Association between Age and Knowledge Regarding Hepatitis B Infection (n=117; r=0.267; p=0.004).

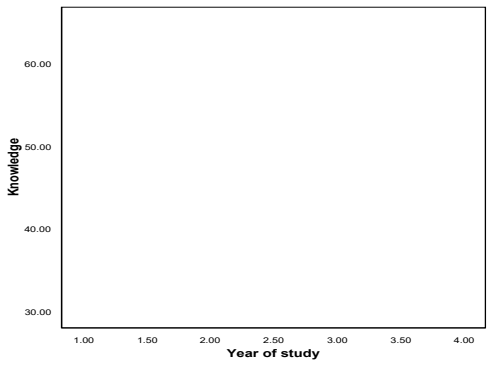

Figure 2. Association between Year of Study and Knowledge Regarding Hepatitis B Infection (n=117; r=0.2317; p=0.012).

The scatterplots in Figure 3 and 4 show association between attitude regarding HBV infection with age and year of study respectively. Pearson correlation test done showed no significant association between attitude regarding HBV infection with age (r=0.043; p=0.642) and year of study (r=0.066; p=0.478) of the respondents. On the other hand, Figure 5 shows the association between knowledge and attitude regarding HBV infection, where the Pearson correlation test resulted in a significant fair positive correlation between the two variables (r=0.376; p<0.001). This means that higher knowledge scores is associated with higher attitude scores regarding HBV infection.

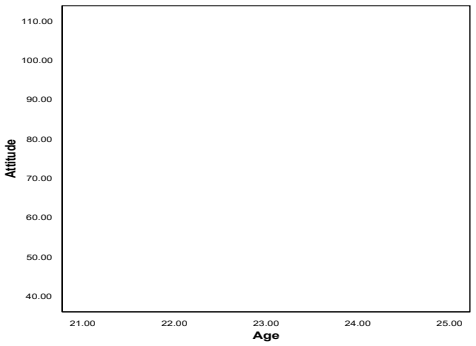

Figure 3. Association between age and attitude regarding hepatitis B infection (n=117; r=0.043; p=0.642).

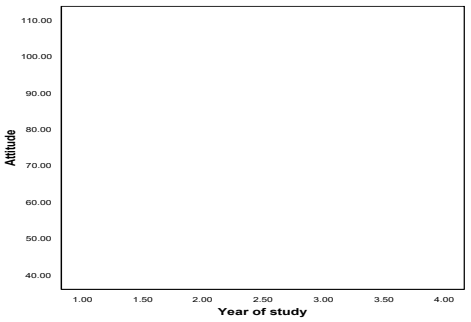

Figure 4. Association between year of study and attitude regarding hepatitis B infection (n=117; r=0.066; p=0.478).

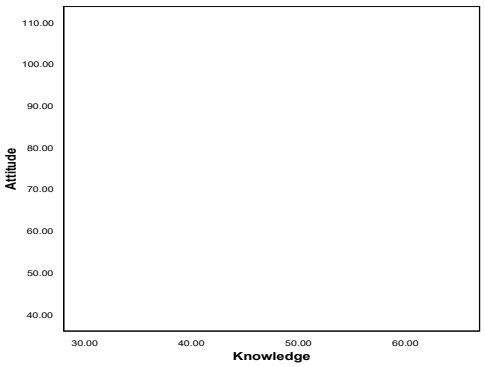

Figure 5. Association between knowledge and attitude regarding hepatitis B infection (n=117; r=0.376; p<0.001).

DISCUSSION

In this study, the respondents who had poor knowledge regarding HBV are more than the respondents who had adequate knowledge. Among the respondents, majority of them had heard about HBV infection. The percentage of respondents who had heard about HBV infection was higher than a previous study.[15] Most of the respondents were females. The age range of the respondents was from 21 to 25 years old.

KAP study is important as it could access the level of an individual's or community's ability to adopt the risk-free behavior for a disease.[16] In assessing the knowledge on the cause of the disease, majority of the respondents noticed that HBV infection can infect our body through contaminated blood. Most of them might have also been aware that HBV can be transmitted via unsterilized healthcare equipment's such as needles, syringes and surgical instruments. Majority of them also thought that HBV infection can be transmitted through unsafe sex, needle prick and from mother to child in uterus. From this result, we can see that most of the medical and health-based students in the current study already knew about the mode of transmission of this disease. A similar study in Ethiopia also presented that most of the students had a good knowledge in term of transmission of the disease.[11] The misconception and confusion in some of the students could threaten their safety and lead to harmful event especially to themselves and other people as this disease is infectious.[14]

The early diagnosis and proper management of not only of HBV disease but of all diseases depend on clear understanding about the signs and symptoms of the disease.[17, 18] A study done in five Nursing Colleges in Nepal depicted that more than three quarters (82.6%) of the students had a good knowledge about the signs and symptoms of HBV infection.[17] Meanwhile, a study done among medical students in a few Medical Colleges also showed most of the students knew about HBV infection signs and symptoms.[19] In the current study, majority of the respondents had the knowledge that HBV infection can cause death. This shows that they recognized this as a severe disease. Majority of the respondents did not know that HBV infection can cause anemia. Most of them realized that HBV infection could lead to liver disease including scarring of liver, liver cancer and liver failure. Similar result was revealed in a study done by a few researchers among medical and health sciences students who also agreed that HBV can lead to liver problems.[11,17,19] There are some students who wrongly thought that heart failure and hypertension are the complications of HBV infection.

Most respondents answered fever is one of the symptoms of HBV infection. This answer was different from previous studies done among medical and nursing students in Pakistan and Nepal where jaundice got the most response.[17, 19] Most of the respondents in current study were not sure whether cough and nausea are one of the symptoms of HBV infection. As for the management and treatment of HBV, majority of the students answered antiviral medication is one of the management method for this disease. Some of them were a little bit confused whether pain relief and transplantation are among the methods of treatment for this disease. Regarding the understanding on curability and treatment availability of HBV infection in this study, more than half did not know whether HBV can be self-cured by the body or not. Similar results were reported by another study conducted in Pakistan.[16] It is almost impossible to do good preventive practice without knowing the general risk factors of HBV infection. Most of the respondents seemed to have less knowledge in treatment as majority of them were unsure of the answers. Most of the respondents have good general knowledge in HBV infection maybe because they came from urban areas which can be related to having better education background in term of hygiene.

Most of the respondents answered wrongly that direct contact with the infected patient might cause them to be infected with this disease and this is not a good sign, as opposed to a study done in Vietnamese university students which indicated that most of them believed that by just holding hand or skin contact with the infected patient will not spread the disease.[15] Meanwhile, they also seemed to realize that by careful handling of the healthcare instruments could save them from being infected. As medical and health-based students, they are exposed to the danger of disease transmission while handling the instruments in the laboratory, clinic or hospital.[19] Most of the current study respondents were interested to join health education program especially those related to HBV infection. One Ethiopian study demonstrated that most of the respondents never participated in any educational

program regarding HBV infection.[11] The authority involved, especially the university itself need to strategize and plan effective health education program, so that the students will have more concern regarding HBV infection. This reflected that the community is lacking in good attitude towards the prevention of HBV infection.

Although unacceptable attitude is higher, majority of them were aware that HBV infection is a serious disease and any infection without preventive action can lead to death. However, a few of them were still unaware of the presence of this disease. Majority of the respondents were also aware that needle prick injury could lead to this disease. In the United States, about 600,000 to 800,000 healthcare workers suffer needle stick injuries and one in every seven workers was pricked by contaminated needle every year.[20] In other study done to Medical students in Aljouf University reported that most of the students were unaware about the danger of this type of accident. Students were prone to experience needle prick injuries as they do not have much experience and lack of expertise in this area.[14] In this study also, most of them knew that HBV screening is needed and the respondents who thought screening of HBV infection is not necessary maybe because they were still unaware of the seriousness of this infection and might not have bad experience yet. Majority of the respondents in the current study knew that they should make sure that they will ask for screening before blood transfusion. One research study reported that most of the students knew to use screened blood for transfusion. This paper also reported the cause of lack of screened blood were because there was lack of resources, low quality of infrastructure and technology, as well as lack of trained staff.[16] Other study among nursing students in Nepal also reported the need of screened blood before transfusion.[17] Most of the respondents agreed on coming to the doctor when they have symptoms of HBV infection. The symptoms of HBV initially might be absent for acute infection phase, but later, some patients will show symptoms including jaundice, dark urine, extreme fatigue, nausea, vomiting and abdominal pain. Some patients might develop acute liver failure which could lead to death. As for chronic infection phase, it can cause a chronic liver infection that later can develop into cirrhosis or liver cancer.[6]

Generally, those who get lower scores should improve their attitude so that they are aware of the risk of this infection. The respondents also knew that they should use sterilized instruments in handling patients. In term of applying protection, most respondents agreed for the usage of protections such as gloves or gowns while handling blood and blood products. Many studies demonstrated that personal protective equipment (PPE) are important and remain as the main preventive measure for HBV infection[14, 21, 22].

Although majority of them have moderate knowledge, but still the respondents with good attitude scores are moderately high. Majority of them also thought that anyone can be infected with HBV and they thought they can die because of this infection. This situation revealed that they realize that they are the risk group for this infectious disease. In Nepal, the nursing students in Kathmandu University perceived that the blood receivers are the most high-risk group to be infected.[17] Additionally, one more Asian study revealed that health-related students perceived themselves as a high-risk group to get HBV infection.[19]

The respondents should correct their attitude so that they are living in a situation which can prevent them from getting the infection. They should not feel ashamed and should immediately consult a doctor when they experience the symptoms. Screening and vaccination are important in the prevention of HBV infection. Vietnamese university students stated that most of the students believed that healthy people need vaccination against HBV infection and agreed regarding personal vaccination importance.[15] Besides, most of the medical students knew HBV vaccination is safe and about half of them had been vaccinated. Otherwise, one more study indicated that the awareness among respondents of biological and non-biological sciences regarding HBV was not satisfactory.[14] The finding is quite similar with the study conducted among multiple medical colleges students where less than half of them were not aware about the availability of vaccination for this disease.[19] A similar result observed in Ethiopia among medical and health sciences students where most of them were never screened for HBV infection neither being vaccinated.[11] The reasons for them not taking the vaccination was due to inaccessibility, lack of motivation, ignorance and fear of injection.[11] In addition, there is the possibility that most of these respondents did not think that they could be

infected with the HBV when the infected people come to meet them.

There was no significant association between knowledge regarding HBV infection and gender in this study. This result was contradictory with an earlier overseas study report.[11] Another neighboring study also reported that males' knowledge was better than females'[15] whereas multiple earlier studies reported that females had higher knowledge than males.[23, 24] Besides, there were significant association between knowledge regarding HBV infection with age, year of study and faculties. This means that different age and faculty reflected the respondents' general knowledge this HBV infection. This study also indicated that majority of the respondents from Medicine Faculty answered correctly in more questions given in knowledge section as compared to the respondents from other faculties. One study conducted in Ethiopia found that there was a significant difference in knowledge between each different course in the university.[11] Psychiatry and medical laboratory students was reported to have poor knowledge regarding HBV infection as compared to medical students.[11] Another study also revealed that "students of nursing (AOR5.87, 95 % CI 1.05–32.88), midwifery (AOR 2.02, 95 % CI 0.26–15.21) and anesthesia (AOR 2.93, 95 % CI 0.24–35.99) had lower knowledge on HBV compared to the students of medicine."[10] One study concluded that the gap in knowledge among non-biological sciences students need to be strengthened.[16] Hence, it is important to strengthen the gaps among the students especially in non-medical based students. This was a cross-sectional study with convenience sampling because of the financial and time constraint. Thereafter it may be lacking in the representativeness of the sample for external validity and might not able to be generalized to the health-based student population, besides the inability to make a causal inference from this study.

Due to the cross-sectional study design used in the current study, a causal inference was unable to be concluded. Furthermore, since convenience sampling was used in the selection of the respondents, it limits the inference of the results to the population, meaning the results were most valid only on the sample in this study. Therefore to get a more conclusive and generalizable results, a research using a bigger random sample in a cohort study is recommended to be carried out in the future.

In conclusion, almost half of the respondents had good knowledge and majority of the respondents had satisfactory attitude score regarding HBV infection. There were no significant association between knowledge and attitude between different genders and community status, but there were significant association between different faculties for both knowledge and attitude, besides the significant association between knowledge regarding HBV infection with age and year of study. Besides, the results show significant positive correlation between knowledge and attitude regarding HBV infection where higher knowledge is associated with higher attitude.

Yazar Katkıları: Çalışma konsepti/Tasarımı: SNBSZA, NAAR, MH; Veri toplama: SNBSZA, NAAR, MH; Veri analizi ve yorumlama: SNBSZA, NAAR, MH; Yazı taslağı: SNBSZA, NAAR, MH; İçeriğin eleştirel incelenmesi: SNBSZA, NAAR, MH; Son onay ve sorumluluk: SNBSZA, NAAR, MH; Teknik ve malzeme desteği: SNBSZA, NAAR, MH; Süpervizyon:yok; Fon sağlama (mevcut ise): yok.
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Hakem Değerlendirmesi: Dış bağımsız.
Çıkar Çatışması: Yazarlar çıkar çatışması beyan etmemişlerdir.
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