

Knowledge, Attitude and Practice of Malaysian Public University Students on Viral Hepatitis

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Abstract

Background: Viral hepatitis is a type of liver disease caused by viral infection and is the leading cause of liver cancer and liver cirrhosis. Adequate information, positive attitude and good practice are essential factors to reduce the risk of this disease. This study aimed to evaluate the knowledge, attitude and practice (KAP) regarding viral hepatitis amongst university students in Klang Valley, Malaysia. **Methods:** A cross-sectional study was conducted on 120 students to represent the population of medical and non-medical science students. A questionnaire was used to collect the data regarding demographic information and KAP of students on viral hepatitis. The Statistical Package for the Social Sciences software was used to analyse the data. **Results:** The mean total scores of KAP regarding viral hepatitis were significantly higher in medical as compared to non-medical science-based participants with the $P < 0.001$ for each comparison. A total number of sources of information were also significantly correlated with a higher total score of KAP regarding viral hepatitis ($P < 0.001$ each). **Conclusion:** The finding of this study is crucial as it can be the benchmark for assessing the KAP of society regarding viral hepatitis.

Keywords: Knowledge, attitude and practice, public university, students, viral hepatitis

INTRODUCTION

Viral hepatitis occupies a significant place amongst health problems in the world particularly in developing countries, especially in East Asia, Southeast Asia, Africa and Pacific Basin.^[1] It is characterised by inflammation of the liver and in many cases leads to permanent liver injury. There are five dominant types of viral hepatitis: hepatitis A, B, C, D and E. Each form of viral hepatitis has a different mode of transmission, causative agents as well as signs and symptoms.^[2,3] The liver plays a vital role as it removes the toxic waste, stores energy, regulates blood clotting and metabolises drugs in our body.^[4] However, viral hepatitis has become a significant public health problem due to the outbreak that occurs globally.^[5] Despite its high prevalence and potential adverse sequelae, there is little research that sheds light on the knowledge and awareness of viral hepatitis infection amongst the general population in Malaysia.^[6] It is essential to know about the underlying information concerning viral hepatitis such as the causative organism, site of action and complications.^[3] The awareness regarding viral hepatitis is low

in Malaysia compared to another transmissible disease such as AIDS.^[7,8] An appropriate assessment of knowledge, attitude and practice (KAP) factors and understanding of the disease is helpful in preventing and necessitates a lifelong adoption of a healthy lifestyle.^[9,10]

However, there are very limited studies related to the KAP of university students about viral hepatitis. This study aims to study the KAP of Malaysian university students and also to compare the KAP between medical and non-medical science-based students. It is hoped that the results of this study can give lots of benefits towards community towards the understanding of the cause and effect of this infection. This study hopefully can convince the readers to improve their perception towards viral hepatitis to produce the healthy

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community soon. At the same time, a clear understanding of this study may improve health professionals' ability to design interventions and encourage the society to undergo vaccination where applicable.

MATERIALS AND METHODS

This is a cross-sectional study [Figure 1] involving a specific self-administered questionnaire in exploring the KAP amongst university students in Klang Valley, Malaysia, regarding viral hepatitis. The study was conducted between 19th November 2012 and 24th February 2013. The questionnaire was administered to the medical and non-medical science-based students studying in six universities around the Klang Valley area. This study used convenience sampling to select the participants to be included in this study by completing the questionnaire.^[7] To be included in this study, the participants should be undergraduate students between the ages of 18 and 25 years old of both genders. They can be from different ethnic background, from the 1st to the 4th year of study. Postgraduate students were excluded from this survey. The sample size calculated using PS Software was 110 participants after considering a 10% non-response rate.

A set of questionnaires was developed and distributed to the participants to get the information them on KAP regarding viral hepatitis. The questionnaire was validated by conducting a pilot study on 11th November 2012, after the content validity of the questionnaire was certified by experts. The sampling of potential participants was done by distributing the questionnaires at the cafeteria, faculty or students' activity centre of the universities selected. The students who were willing to complete the survey were chosen as the participants in the study and became the representatives of either the medical science or non-medical science-based students. The questionnaire was developed into four main sections. The first section contained the demographic questions such as age, gender, course, year of study, faculty and marital status. The second section was mainly close-ended questions on knowledge regarding viral hepatitis and its preventive measures. The third and the fourth sections were using the Likert scale of three choices: 'disagree', 'neither agree nor disagree' and 'agree' on items in the third section on attitude regarding viral hepatitis, and 'never', 'seldom' and 'always'

in the fourth section centred on the practiced towards viral hepatitis.

All the collected data were analysed using the Statistical Package for Social Sciences software version 20.0 (IBM Corporation, Armonk, New York, United States) and Microsoft Excel 2010 (Microsoft Redmond campus, Redmond, Washington, USA). The socio-demographic characteristics and each item on KAP were described using frequency and percentage, and then, each answer in Sections 2, 3 and 4 was scored accordingly. The total scores for each section were used to compare the KAP regarding viral hepatitis between medical and non-medical science-based participants using independent *t*-test and its association with the total number of source of information was analysed using Pearson correlation test. This study was conducted to cater for the requirement of the bachelor's Degree of Biomedical Science, for which the approval from the Department of Biomedical Science, Kulliyah of Allied Health Sciences, International Islamic University Malaysia, was obtained as an undergraduate final year project. Written consent was obtained from each participant to ensure their voluntarism and their confidentiality was protected throughout the study.

RESULTS

One hundred and fifty questionnaires were distributed to the students in the six selected universities in the Klang Valley area of Malaysia. Twenty of the questionnaires were not returned and ten were found to be incomplete, and thus, the final completed questionnaires collected and used in data analysis at the end of the survey were 120.

Socio-demographic characteristics of the participants

The first part of questionnaire dealt with the participants' socio-demographic characteristics as detailed out here. Most of the participants were 23 years old ($n = 43$, 35.8%), and the mean age was 22.6 with the standard deviation of 1.55. The range of age for the participants was from 19 to 27 years old. Both males ($n = 53$, 44.2%) and females ($n = 67$, 55.8%) were involved in this survey, where most of the participants were females. Other than that, almost all of the participants were Malay ($n = 119$, 99.2%) except for one participant from another race ($n = 1$, 0.8%). All the participants involved were Malaysian ($n = 120$, 100%). According to the marital status, most of the participants were single ($n = 118$, 98.3%) and only a few of them were married ($n = 2$, 1.7%). Most of the participants involved in this study were in their 3rd year of study ($n = 49$, 40.8%), followed by the participants in year 4 ($n = 37$, 30.8%), year 2 ($n = 23$, 19.2%) and year 1 ($n = 11$, 9.2%). A total of ten bachelor programs were involved in this study, from which the participants were then divided into two major fields of study, which were the medical science (Medical, Dentistry and Laboratory Technologist courses) ($n = 58$, 48.3%) and non-medical science (Engineering, English, Information and Computer Technology, Islamic Study, Applied Science, Statistics and

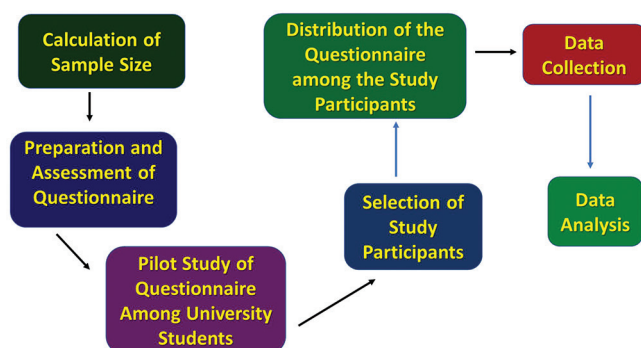


Figure 1: Flowchart of research methodology.

Business courses) ($n = 62$, 51.7%) to represent the population of university students in Klang Valley.

Knowledge regarding viral hepatitis

In relation to the participants' sources of information regarding viral hepatitis, majority of them ($n = 84$, 70.0%) got their knowledge from the internet, besides the healthcare workers, families, friends and others as detailed out in Table 1. On the other hand, Table 2 shows the distribution of the participants' knowledge related to viral hepatitis as the questions asked in the questionnaire. Most participants ($n = 115$, 95.8%) were aware about viral hepatitis. Although they had heard about the disease, they did not really know about the types of hepatitis, and only 23.3% ($n = 28$) of the participants answered correctly on this. Regarding the mode of transmission for hepatitis A, 60 (50.0%) participants answered correctly that it is from the contamination of food and/or water as the possible means to get the disease. For the method of transmission for hepatitis B and C, only 31.7% ($n = 38$) of the participants answered on the statement of sharing personal items such as a razor and/or toothbrush correctly. Most of the students knew that viral hepatitis is related to the liver disease and cancer ($n = 113$, 94.2%). The knowledge regarding vaccination of viral hepatitis was moderate as 49.2% ($n = 59$) answered correctly for vaccination of hepatitis A, 73.3% ($n = 88$) for vaccination hepatitis B and 50.8% ($n = 61$) for vaccination of hepatitis C. They were quite low correct feedback regarding the signs and symptoms regarding the disease except for jaundice ($n = 88$, 73.3%).

Attitude regarding viral hepatitis

Table 3 illustrates the details on the attitude of the participants regarding viral hepatitis. Almost half of the participants ($n = 58$, 48.3%) agreed that there were possibilities of them to get infected with the disease. Majority of them ($n = 105$, 87.5%) agreed to talk to the doctor while 94 (78.3%) of them preferred to talk to their parents if they were infected by viral hepatitis. Less than half of the participants ($n = 50$, 41.7%) would not take common medication if they had the symptoms of hepatitis, but most of them would do something if they noticed any symptoms ($n = 64$, 61.7%). Most of the participants fear death ($n = 63$, 52.5%) and possibilities to spread the disease to their family if they were diagnosed with the disease ($n = 84$, 70.0%). Majority of the participants ($n = 101$, 84.2%) would wear a glove while handling blood and body fluid and 85.8% ($n = 103$) would discard the materials which had been in contact with blood and body fluid after treatment of patients. Although not all the participants went to the barber for the haircut, they still responded to the question as they might observe the situation in the salon, and as a result, 65.8% ($n = 79$) of them agreed to ask the barber to change the razor before getting a haircut. Ninety-seven (80.8%) participants would ask the blood to be screened before blood transfusion while 91 (75.8%) of them wanted to have a screening for viral hepatitis.

Table 1: Sources of information regarding viral hepatitis ($n = 120$)

Source of information	<i>n</i> (%)
Doctor or healthcare workers	61 (50.8)
Friends	66 (55.0)
Parent or family	46 (38.3)
Radio and TV	64 (53.3)
Internet	84 (70.0)
Books and articles	70 (58.3)
Pamphlet and articles	63 (52.5)
Formal class (lecture)	57 (47.5)

Table 2: Knowledge of participants regarding viral hepatitis ($n = 120$)

Statements	Yes, <i>n</i> (%)	No, <i>n</i> (%)	Don't know, <i>n</i> (%)
The difference between each type of viral hepatitis			
Mode of transmission	58 (48.3)*	8 (6.7)	54 (45.0)
Signs and symptoms	62 (51.7)*	14 (11.7)	44 (36.7)
Vaccination	65 (54.2)*	8 (8.7)	47 (39.2)
Treatment	63 (52.5)*	15 (12.5)	42 (35.0)
Causative agent	68 (56.7)*	10 (8.3)	42 (35.0)
The possible method of transmissions for hepatitis A			
Contaminated food and/or water	60 (50.0)*	49 (40.8)	11 (9.2)
Sexual contact	35 (29.2)	28 (23.3)*	57 (47.5)
Mother to child	36 (30.0)	34 (28.3)*	50 (41.7)
Through blood and/or body fluid	43 (35.8)	29 (24.2)*	48 (40.0)
Sharing razor and/or toothbrush	21 (17.5)	37 (30.8)*	62 (51.7)
Casual or social contact	17 (14.2)	44 (36.7)*	44 (36.7)*
The possible method of transmissions for hepatitis B and C			
Contaminated food and/or water	23 (19.2)	37 (30.8)*	60 (50.0)
Sexual contact	61 (50.8)*	8 (6.7)	51 (42.5)
Mother to child	62 (51.7)*	13 (10.8)	45 (37.5)
Through blood and body fluid	72 (60.0)*	5 (4.2)	43 (35.8)
Sharing razor and/or toothbrush	38 (31.7)*	22 (18.3)	60 (50.0)
Casual or social contact	7 (5.8)	49 (40.8)*	64 (53.3)
Vaccination is available for the following viral hepatitis			
A	59 (49.2)*	61 (50.8)	
B	88 (73.3)*	32 (26.7)	
C	59 (49.2)	61 (50.8)*	
The signs/symptoms of viral hepatitis			
Jaundice	88 (73.3)*	2 (1.7)	30 (25.0)
Nausea and vomiting	63 (52.5)*	11 (9.2)	46 (38.3)
Abdominal pain	62 (51.7)*	12 (10.0)	46 (38.3)
Fever	65 (54.2)*	11 (9.2)	44 (36.7)
Flu	27 (22.5)	33 (27.5)*	60 (50.0)

*The correct answers

Table 3: Attitude of the participants regarding viral hepatitis (n=120)

Statement	Agree, n (%)	Neither agree nor disagree, n (%)	Disagree, n (%)
Possibilities to get infected with viral hepatitis	58 (48.3)	45 (37.5)	17 (14.2)
Willing talk to this person if got infected			
Doctor	105 (87.5)	12 (10.0)	3 (2.5)
Spouse	73 (60.8)	47 (39.2)	0 (0.0)
Parent	94 (78.3)	24 (20.0)	2 (1.7)
Friends	52 (48.3)	49 (40.8)	19 (15.8)
No one	13 (10.8)	52 (43.3)	55 (45.8)
Willing to take this action/s if have symptoms of viral hepatitis			
Go to a health facility	103 (85.8)	8 (6.7)	9 (7.5)
Go to traditional healer	22 (18.3)	58 (48.3)	40 (33.3)
Just take paracetamol or common medication	15 (12.5)	55 (45.8)	50 (41.7)
Do nothing	9 (7.5)	37 (30.8)	64 (61.7)
Fear these consequences if diagnosed with viral hepatitis			
Death	63 (52.5)	32 (26.7)	25 (20.8)
Spread of disease to family	84 (70.0)	23 (19.2)	13 (10.8)
Cost of treatment	49 (40.8)	43 (35.8)	28 (23.3)
Isolation from society	55 (45.8)	49 (40.8)	16 (13.3)
Will ask for a new syringe before an injection	94 (78.3)	19 (15.8)	7 (5.8)
Will wear gloves on handling blood and body fluid	101 (84.2)	17 (14.2)	2 (1.7)
Will discard materials in contact with blood and body fluid after treatment of patients	103 (85.8)	16 (13.3)	1 (0.8)
Will ask the barber to change razor for a haircut	79 (65.8)	35 (29.2)	6 (5.0)
Will choose a clean food premise	104 (86.7)	16 (13.3)	0 (0.0)
Will get a vaccination if working with blood and body fluid	96 (80.0)	22 (18.3)	2 (1.7)
Will ask whether the blood had been screened before blood transfusion	97 (80.8)	21 (17.5)	2 (1.7)
Want to be screened for viral hepatitis	91 (75.8)	22 (18.3)	7 (5.8)
Will spread the information regarding viral hepatitis to family and friends	94 (78.3)	20 (16.7)	6 (5.0)
Will avoid meeting viral hepatitis patients	26 (21.7)	40 (33.3)	54 (45.0)

Practices regarding viral hepatitis

Practices of the participants regarding viral hepatitis are detailed out in Table 4. Many of the participants cared about the cleanliness as 94.2% ($n = 113$) of the participants always wash their hands before eating, and 80.8% ($n = 97$) chose a clean restaurant before taking a meal. Seventy-one (59.2%) of the participants always cover their wound if they were injured. However, most of the participants seldom read the health article ($n = 72$, 60.0%) and they usually surf the internet to obtain the information on health ($n = 73$, 60.8%). Fifty-five (45.8%) of participants always consult healthcare workers to know more about viral hepatitis. As the participants gain the information about health from the internet, they might have lack of interest to participate and therefore never involved in a program related to this disease ($n = 75$, 62.5%).

Comparing knowledge, attitude and practice regarding viral hepatitis between medical and non-medical sciences

The KAP regarding viral hepatitis were compared using independent *t*-test between medical and non-medical science-based participants using the total scores of the KAP. The results showed statistically significant difference between the two groups in terms of knowledge ($t = 7.156$, $P < 0.001$),

Table 4: Practice of participants on hepatitis (n=120)

Statement	Always, n (%)	Seldom, n (%)	Never, n (%)
Wash hands before eating	113 (94.2)	7 (5.8)	0 (0.0)
Eat healthy food every day	73 (60.8)	47 (39.2)	0 (0.0)
Choose a clean restaurant to go to	97 (80.8)	23 (19.2)	0 (0.0)
Share personal belonging (e.g., razor and toothbrush)	15 (12.5)	18 (15.0)	87 (72.5)
Cover wound if got injured	71 (59.2)	42 (35.0)	7 (5.8)
Immediately get treatment if have signs and symptoms of viral hepatitis	77 (64.2)	35 (29.2)	8 (6.7)
Consult healthcare workers to know more about health	55 (45.8)	45 (37.5)	20 (16.7)
Surf internet to obtain information regarding health	73 (60.8)	42 (35.0)	5 (4.2)
Frequencies of reading health articles	41 (34.2)	72 (60.0)	7 (5.8)
Participated in program related to viral hepatitis	16 (13.3)	29 (24.2)	75 (62.5)

attitude ($t = 3.892$, $P < 0.001$) and practice ($t = 5.388$, $P < 0.001$), where the total scores of the three variables were higher in medical science participants, as shown in Figure 2.

Correlation between knowledge, attitude and practice regarding viral hepatitis with total number of sources of information

The relationship between the total scores of KAP of the participants with the total number of the sources of information was investigated using Pearson product-moment correlation coefficient, as shown in Table 5. Statistically significant positive good correlation ($r = 0.602$, $P < 0.001$) was found between total scores of knowledge and the total number of the sources of information. Similarly, the total scores of attitudes were found to have a significant positive fair correlation ($r = 0.386$, $P < 0.001$) with the total number of the sources of information. Furthermore, significant positive but little correlation was also resulted between the total scores of practices regarding viral hepatitis with the total number of the sources of information ($r = 0.298$, $P = 0.001$). These results show that the KAP of participants was higher when the total number of the sources of information increased.

DISCUSSION

Viral hepatitis was first described since the fifth century B.C. but particularly common during the various wars in the 19th and 20th centuries.^[11,12] It is one of the major infectious diseases in the world and commonly causes liver failure and hepatocellular carcinoma.^[3] Hence, this study was conducted to investigate the KAP regarding viral hepatitis and their difference between medical science and non-medical science students and the source of information regarding hepatitis.

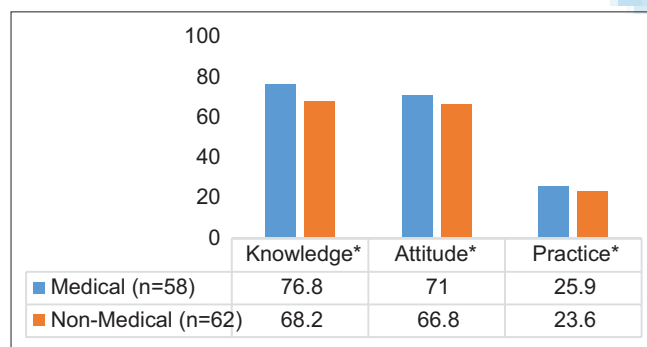


Figure 2: Comparison of knowledge, attitude and practice regarding viral hepatitis between medical and non-medical sciences participants
* $P < 0.001$ using independent t -test.

Table 5: Correlation between knowledge, attitude and practice regarding viral hepatitis with total number of sources of information using Pearson correlation test ($n=120$)

Total number of sources of information	<i>r</i>	<i>P</i>
Versus total score of knowledge	+0.602	<0.001
Versus total score of attitude	+0.386	<0.001
Versus total score of practice	+0.298	0.001

Knowledge of university students regarding viral hepatitis

The majority (95.8%) of the current study participants had heard about viral hepatitis. Hepatitis is not a seasonal type of disease. The prevalence of viral hepatitis C infection amongst Malaysian adults has been assessed at 2.5%. Comparable results have been stated from Indonesia, Cambodia, Thailand and the Philippines. Although it is <1% in Laos, Myanmar and Singapore, the highest prevalence (>6%) has been described in Vietnam.^[13] The world's attention towards this disease resulted in awareness of Malaysian government where the former Malaysian Health Minister used to say that the creation of 'wide-spread awareness of the disease is an important first step to combat it. Sufficient public attention will encourage people to screen themselves and go for early treatment'.^[14] However, the information gained by the citizens is inadequate, especially regarding the general knowledge of this disease, and about half a million Malaysians had been infected with hepatitis C and could be due to a lack of awareness about the disease.^[15] Correspondingly, more than half of the participants in the current study wrongly answered the question on type of hepatitis.

More than half of the participants were unable to correctly identify the possible method of transmission for hepatitis A, B and C. These types of hepatitis are common in Malaysia, and they should know how they could be infected. The current prevalence and endemicity of hepatitis A are low in Malaysia, but the possibility of an outbreak remains.^[16] The outbreak may occur in an institution or food outlets such as colleges, hospitals and restaurants. The food handlers might be careless concerning hygiene. Other than that, the travellers that returned from an endemic region could also cause an outbreak. Hepatitis A and B are associated with significant morbidity and mortality amongst travellers far more than those of any other vaccine-preventable infection in travellers, with the exception that hepatitis B shows a slightly higher mortality rate in emigrants.^[17-19] The highest percentage of students answering the possible method of transmission for hepatitis B and C was through blood and/or body fluid. However, most of the participants did not realise that sharing personal items such as razor and toothbrush could also be one of the modes of transmission for hepatitis B and C. Most of the university students live in hostels, and it is common practice, especially amongst the male students to share their personal belongings with friends. Thereafter, a high percentage of hepatitis B and C-positive participants had a tendency of sharing personal things.^[20,21] However, most of the participants in the current study knew that hepatitis is related to liver disease or liver cancer.

The knowledge of participants on the availability of vaccines for some types of hepatitis was assessed. Many participants knew about the vaccination program by the Ministry of Health for the paediatric population to reduce the risk of hepatitis B in Malaysia. Three doses of vaccination for hepatitis B were mandatory to the newborn baby and continued in the 1st and 6th months after birth since 1989. This vaccination provides

protection as the immunity towards this virus had been induced. Majority of the participants noticed that jaundice is one of the signs and symptoms of hepatitis. However, half of them did not know whether flu is one of the signs and symptoms of this infectious disease. Even though conventional signs and symptoms such as nausea and vomiting, abdominal pain and fever are related to hepatitis, flu is not one of them.

The highest percentage of source of information was internet (84.0%), followed by books and articles (58.3%), friends (55.0%), television and radio (53.3%), pamphlet (52.5%), healthcare workers (50.8%), lectures (47.5%) and finally family (38.3%). It could be because most universities provide access to internet to their students, and it is easier for them to surf the web rather than going to the library to find a book. University students gained vast information from internet compared to another media channel.^[22] In a study regarding the adolescent cybersurfing for health information, it was found that the accessibility and accuracy of health information from the internet can help in decision makings, such as identifying alternative options or possible consequences.^[23]

Attitude of university students regarding viral hepatitis

The current study found that not all the participants agreed with the possibility of them to get infected with viral hepatitis, showing that they might not be aware about the risk and danger of this silent killer disease. Lack of awareness and interest regarding current health issues are one of the causes which can result in bad attitude of the participants.^[21]

Majority of the participants will talk to the clinician if they get infected with hepatitis, which could be due to the trust of a patient to a medical practitioner. The reliability of a patient to obtain health and medical information from a medical doctor would increase their understanding regarding the disease. A finding from a study in the United States supported this idea of trust and reliance of a patient on a medical doctor, and they added that the most reliance population were young and educated people.^[24]

More than half of the participants fear of death and they were also worried that the disease can spread to their family if they were diagnosed with viral hepatitis. The advancement of technology together with the expertise of healthcare workers and scientists leads to the discovery of treatment and medication to this possibly fatal disease.^[25] Hospital staff and all other human or veterinary healthcare workers, including laboratory, research, emergency service or cleaning personnel, are exposed to the risk of occupational infection following accidental exposure to blood or body fluids contaminated with virus, bacteria, parasite or yeast that can initiate a disease.^[26] Majority of the participants would wear gloves while handling blood and body fluid and would discard the materials which had been contaminated with patient's blood and body fluid. Majority would also ask the physician to screen the blood before they were to receive any blood transfusion. However, in Malaysia, the procedure of blood donation in the hospital had included the screening tests for hepatitis B and C virus on the donated blood. On the other hand, it is advised to ask

the physician to reassess the blood before blood transfusion as a precaution step. Ninety-one of the participants wanted to be screened for viral hepatitis. Screening is the first step in determining the disease. Screening can include anyone who had blood transfusion before 1994, history of needle-stick injury, injecting themselves with recreational drugs, those with tattoos or had unsterile acupuncture and children whose mothers are viral hepatitis patients. The Malaysian Ministry of Health had been organising campaigns to increase the awareness of the citizens, and one of the programs was the screening test for viral hepatitis.^[14]

Practice of university students regarding viral hepatitis

A high percentage of the participants in the current study always washed their hands before eating. As hepatitis A can efficiently be transmitted through contaminated food and/or water, it is necessary to observe the food cleanliness. According to the fact sheet published by Hepatitis Queensland, good hygiene practices, handwashing and routine cleaning are included as standard precautions against hepatitis A.^[27] Standard precaution is defined as the most important strategy for successful infection control in the healthcare setting.^[27] Subsequently, washing hands has indirectly reduced the risk of hepatitis A.^[27] On the other hand, more than half of the participants always cover their wound if they were injured. As skin is the first organ exposed to any infection, it is crucial to cover any cut or abrasions immediately.^[28,29] However, less than half of the participants always consult with the healthcare workers or often read the health articles. To be well informed about any disease, the participants should search for the information. It is crucial to know the facts and having the proper attitude to prevent the spread of viral hepatitis.^[21] Lack of interest and awareness could be one of the reasons which resulted in only 16 out of 120 participants have participated in a program related to viral hepatitis.

Comparison of knowledge, attitude and practice regarding viral hepatitis between medical and non-medical science-based students

It was found in the current study that the total scores of KAP regarding viral hepatitis were significantly higher in medical as compared to the non-medical science-based students. The differences showed that the medical science students have better KAP regarding viral hepatitis, which gap was parallel with an earlier overseas study.^[21] The medical students specifically learnt about infectious diseases, including viral hepatitis in their syllabus and they regularly handle the blood and body fluid. They also face the threat of injury and have a high risk of blood-borne infection such as hepatitis B and C viruses.^[30] Their right attitude and practice regarding the virus and its transmission and prevention can stop the spread of disease in hospitals and society.^[31]

Correlation between knowledge, attitude and practice regarding viral hepatitis with total number of sources of information

This study found a significant positive correlation between total scores of KAP regarding viral hepatitis with the total

number of the sources of information. These positive correlations reaffirm the relationship between KAP with the sources of information. As the total sources of information increased, the total scores of KAP would also increase. In conclusion, adequate information regarding hepatitis might lead to a positive attitude and practice of the participants. The current study findings were quite like the multiple studies which reported that adequate sources of information and knowledge directly related to positive attitude and good practice.^[32,33]

Limitations of the study and recommendations

This cross-sectional study was just a preliminary investigation on KAP of students regarding viral hepatitis. The results cannot be generalised to the actual population as the population selected for this study were only the university students in Klang Valley. Apart from that, the sample size was quite small due to the time constraint and financial issue. Since the study used convenience sampling, it was prone to selection bias. Although there were some limitations found in this study, it still can be a reference or guideline to assess the KAP of university students, especially in Klang Valley regarding viral hepatitis. In future, it is recommended to enlarge the sample size and select the best target population to make a valid inference that will represent the actual population of the society.

CONCLUSION

The study was successfully carried out to determine the KAP of university students regarding viral hepatitis in Klang Valley. The study identified a significantly higher level of KAP regarding viral hepatitis in the medical science students as compared to the non-medical science-based students. Besides that, the relationship between total scores of KAP and total number of sources of information was proven. Viral hepatitis is closely related to the liver disease or liver cancer, and it can lead to death. This silent killer has been taken for granted by the society due to lack of awareness and inadequate of information. Although this study focused on the students' population, it can be a good start to open the eyes of the society to be alert and seeking more knowledge regarding hepatitis. The broader point of view, it is one of the crucial steps to improve the national healthcare system. This study involved only a specific target of the population, and it was just a preliminary study regarding viral hepatitis.

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Nil.

Conflict of interest

There is no conflict of interest in this study.

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