



RESEARCH ARTICLE

KNOWLEDGE, ALTITUDE AND PRACTICE OF MEDICAL STUDENTS IN JAZAN UNIVERSITY TOWARD VIRAL HEPATITIS

Jaber Sharahili, Nabil Alamir, Ahmed Ajeebi, Eman Otaif, Mohammad Dighriri, Ahmed Alkhawaji, Yasser Doshi, Hassan I. Quzi, Abdu Mohsen Adawi, Turki Anab, Abdulaziz Almahdi, Alhasan Alrefai and Amani Madkhali

Faculty of Medicine, Jazan University, Saudi Arabia

ARTICLE INFO

Article History:

Received 26th October, 2016

Received in revised form

22nd November, 2016

Accepted 08th December, 2016

Published online 31st January, 2017

Key words:

Knowledge, Altitude, Practice, Medical students, Jazan university, Viral hepatitis.

ABSTRACT

Background: HAV, HBV, HCV, HDV and HEV; there are the main five viruses can cause hepatitis. Types B and C can lead to chronic disease and the most common cause of liver cirrhosis and cancer.

Objectives: The purpose of this study is to estimate the awareness towards viral hepatitis in KSA AND Specially towards medical students in Jazan University

Methods: A Cross sectional descriptive study by total of 384 questionnaires distributed.

Results: 354 students returned completed forms (response rate: 92.19% [354/384]). The majority were females (94.89% [167/176]), in general males showed better knowledge toward viral hepatitis while females showed better altitude, however the level of knowledge and altitude were very poor among the students

Conclusion: Generally; In this study we conclude the knowledge of medical students were poor reverse they attitude. The male are knowledgeable than female, but in attitude the female have a good attitude than male. But not a big difference.

Copyright©2017, Jabber Sharahili et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Jabber Sharahili, Nabil Alamir, Ahmed Ajeebi et al. 2017. "Knowledge, altitude and practice of medical students in Jazan university toward viral hepatitis", *International Journal of Current Research*, 9, (01), 44839-44847.

INTRODUCTION

HAV, HBV, HCV, HDV and HEV; there are the main five viruses can cause hepatitis. Types B and C can lead to chronic disease and the most common cause of liver cirrhosis and cancer.(WHO, 2013) The Hepatitis A commonly occurs in sporadic form and can cause epidemics. 1.4 million cases of hepatitis A an estimated in the worldwide.(WHO, 2013) A 2 billion people in the worldwide an estimated with HBV and about six thousand of them die every year. The chronic liver infection by HBV it's occur more than 240 million people. From 50-100 times infections by HBV occur more HIV. (WHO, 2013)A 350 thousand people die from 3-4 million people infected with HCV every years. About half of them are chronically infected with this virus.(WHO, 2013)More than 10 million people in the worldwide are infected with HDV. (WHO, 2013)But, there are approximately 20 million people are infected by HEV every year.(WHO, 2013)These types of viral hepatitis may be occur without symptoms;If symptoms appear; can be include : (fever, malaise, anorexia (loss of appetite), diarrhoea, nausea, vomiting, hepatomegaly, tenderness, abdominal discomfort, dark-coloured urine and jaundice (a yellowing of the skin and whites of the eyes); Also,

in cases with chronic liver infection by HBV, HCN and HDV can developed later int cirrhosis or liver cancer. (WHO, 2013) The HAV and HEV commonly are transmitted by the faecal-oral route. But HBV and HDV can transmitted through body fluids (Blood-Semen-Saliva...etc). Unlike HCV can transmitted through blood and sexual contact (less common).
Prevention:

HAV and HBV: Vaccines; Also can prevent infection by HDV by HBV vaccine in absence of chronic HBV carriers.

HAV and HEV: Through Improved sanitation, food safety and personal hygiene.

HCV: Caution while dealing with the blood of a patient infected with the virus or unsafe sexual contact. (WHO, 2013) The viral hepatitis can cause a lots of problems including epidemics and outbreaks in many countries. They 2 types had major problems with health care workers (HCWs) and this target of students will be under risk in future. This research should be conduct on Puplic, HCWs, barbers and clients and all students will be at risk in future.

Because we do not have enough time to do that; we do the available one in this short time and we hope to be satisfactory for all.

Also; We do this research because they endemic in my country specially in jazan city and there is a lack of research relating to the measurement of the degree of knowledge and attitudes of Saudi students about viral hepatitis.

PATIENTS AND METHODS

Study design

- Cross sectional descriptive study

Study area:

- This study was conducted at Jazan University (faculty of medicine) that located in Jazan town, which is located in south-western part of Saudi Arabia between longitude 42 degrees 8,43 degrees and latitudes 5,16 degrees and 17 degrees. It's bounded to the north by Asir region and to the south by State of Yemen and from the east Asir region and the State of Yemen, and the Red Sea to the west.

Study population:

- The focus of this study is on the medical students in Jazan University (Medical students from 2nd to 6th year).

Sample size and sample design

The study was conducted on faculty of medicine.

Sample size determination for estimating the population proportion is calculated by using the following formula:

$$n = \frac{z_{1-\alpha}^2 P(1-P)}{d^2}$$

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384$$

- Where: Z=1.96, d=0.05% and P=50 %, (P = was set 50 % it will provide the maximum sample size since there was no prior knowledge about the Knowledge, attitude and practice of medical students in Jazan university towards viral hepatitis.

From the above-mentioned equation the sample size is 384 individual.

- The total number of medical students is around 500 students, we take a random students in every single class depending on the previous equation to give equal chances.

So 384 questionnaire was divided by equal, we have around 270 students in the male section and 230 students in the female section.

That means $270/500=0.54$ which means $0.54*384=207$ questionnaire for male section. And $230/500=0.46$ which means $0.46*384=177$ questionnaire for female section.

Methods of data collection

- Data was collected using a self-administered questionnaire.
- The questionnaire was written in English and Arabic Form and consisted of 36 question (21 about the knowledge, 9 about the attitude, and 6 about the practice). The most of them were closed ending questions and few of them were opened questions.

Data Entry and Analysis

- The SPSS (Statistical Package for Social Sciences) software program was used for data analysis. Frequency distribution was obtained and descriptive statistics will be calculated.

RESULTS

The study results according to the research objectives are shown below in many bar charts (for comparing) and tables (KAP for all students). Of 384 questionnaires distributed, 354 students returned completed forms (response rate: 92.19% [354/384]). The majority were females (94.89% [167/176])

Table 1. The number and percentage of response in this research between male and female; The majority of respondent appear in female section than male

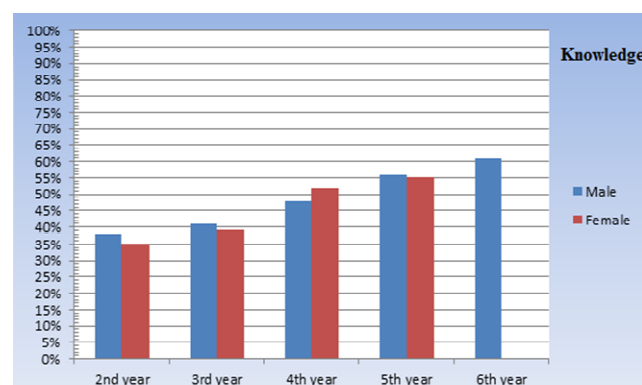
	Frequency	Percent of response	Percent for total (354)
Male	187 from 207	90.34%	52.8
Female	167 from 176	94.89%	47.2
Total	354 from 384		100.0

Table 2. The number and percentage of respondents in each level of education

	Frequency	Percent
2nd year	85	24.0
3rd year	81	22.9
4th year	87	24.6
5th year	77	21.8
6th year	24	6.8
Total	354	100.0

Comparison 1

Male					Female				
2 nd year	3 rd year	4 th year	5 th year	6 th year	2 nd year	3 rd year	4 th year	5 th year	
38,06 %	40,52 %	47,89 %	55,99 %	60,51 %	35,06 %	39,04 %	52,41 %	54,50 %	
48,59%					45,25%				



P value (0.5445)

Between the male and female

This comparison between each level of education (Knowledge)

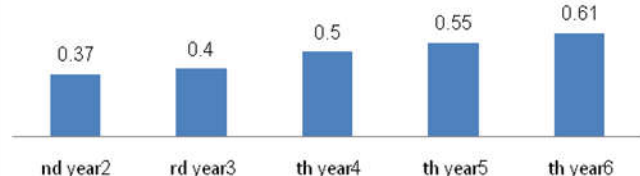
All students ((male &female)				
2 nd year	3 rd year	4 th year	5 th year	6 th year
36,56%	39.78%	50,15%	55,25%	60,51%
Total 46,92%				

This comparison between each level of education (Attitude)

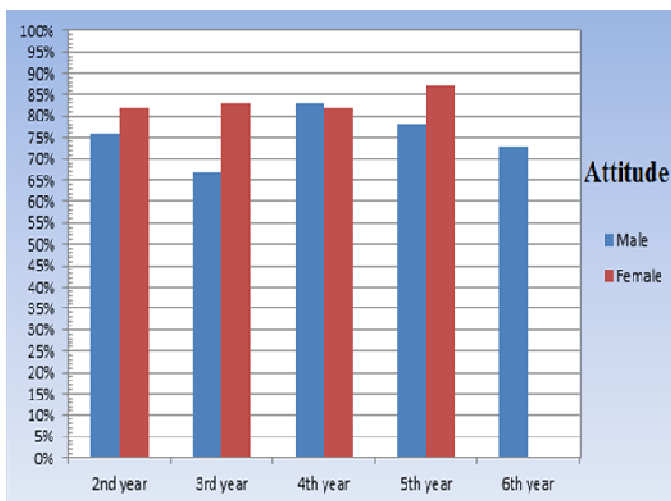
(A) all students (male &female)				
2 nd	3 rd	4 th	5 th	6 th
78,79%	75%	82,72%	82,38%	73,43%
Total = 79,49%				

Knowledge of all students (By each level of education) in jazan university toward viral hepatitis

■ Knowledge of all students (By each level of education) in jazan university toward viral hepatitis

**Comparison 3**

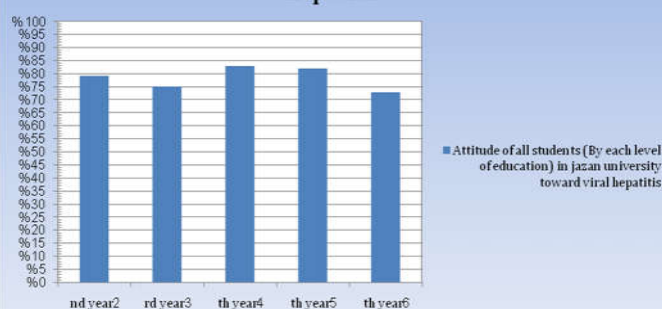
Male					Female				
2 nd year	3 rd year	4 th year	5 th year	6 th year	2 nd year	3 rd year	4 th year	5 th year	6 th year
75,51%	66,52%	83,02%	77,97%	73,43%	82,06%	83,47%	82,41%	86,78%	
75,29%					83,68%				

This comparison between male and female in each level of education (Attitude)

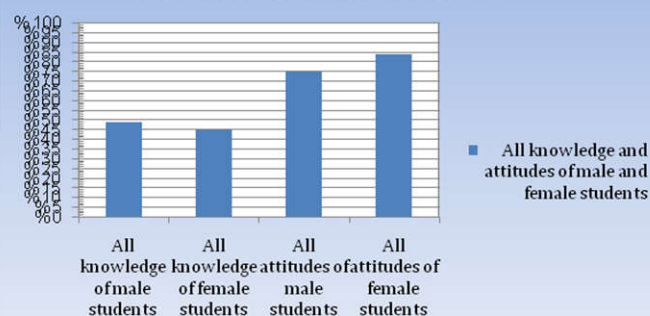
Attitude of medical students (male and female) in each level of education in jazan university

P value (0.0545) Between the male and female

Attitude of all students (By each level of education) in jazan university toward viral hepatitis



All knowledge and attitudes of male and female students

**Comparison 6**

Percent of knowledge and attitude in medical students toward viral hepatitis in jazan university

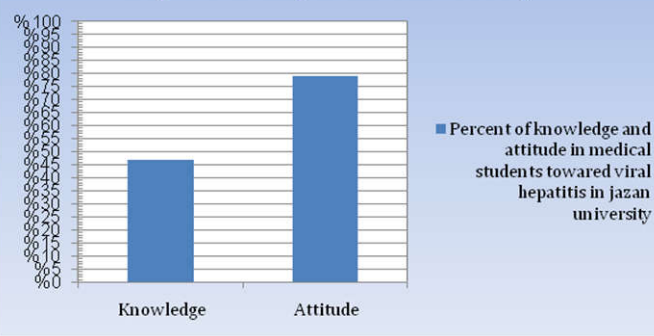


Table 3.

This table regarding to transmission of HAV

	Frequency	Percent
By Food and Water	144	40.7
By Blood	65	18.4
By sexual contact	15	4.2
By saliva	16	4.5
Through placenta	11	3.1
1 and 4 together	103	29.1
Total	354	100.0

Table 3, shows the majority of the respondent (n=144) 40.7%; answers correctly about the transmission of HAV by fecal-oral rout (By food and water). Only (n=103) 29.1% of them say the

transmission of HAV by Food, water and saliva and that is wrong. Also; (n=65) 18.4% of respondent answers incorrectly about the mode of transmission of HAV by Blood. Less than 5% of them answers incorrectly about the transmission of this virus by Sexual contact, Saliva and through placenta.

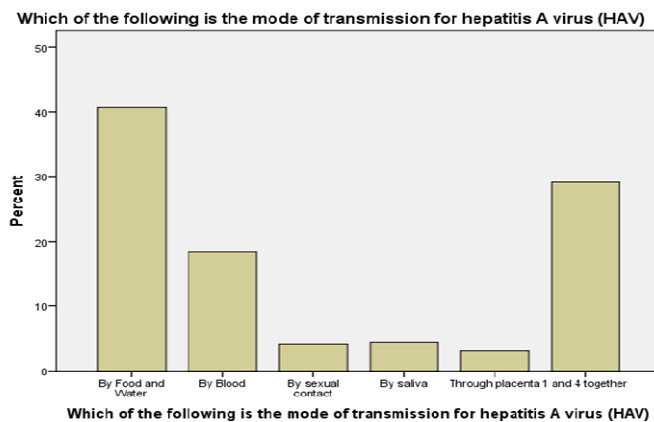


Table 4.

This table regarding to prevention of HAV			
	Frequency	Percent	Valid Percent
By vaccines	57	16.1	16.4
By Personal hygiene and improved sanitation	100	28.2	28.8
By avoid handshake and hugging	7	2.0	2.0
By Wear condoms	16	4.5	4.6
By wear gloves in the operating room	7	2.0	2.0
1 and 2 together	160	45.2	46.1
Total	347	98.0	100.0
Missing System	7	2.0	
Total	354	100.0	

Table 4, shows the majority of the respondent (n=160) 46.1%; answers correctly about the prevention of HAV transmission by Vaccines, personal hygiene and improve sanitation. Only 28.8% of them think the personal hygiene and improve sanitation only can prevent that and 16.4% can done by vaccines only. Less than 5% of them answers incorrectly about the prevention of HAV transmission by Avoid handshake and hugging, wear condom and wear gloves in operating room.

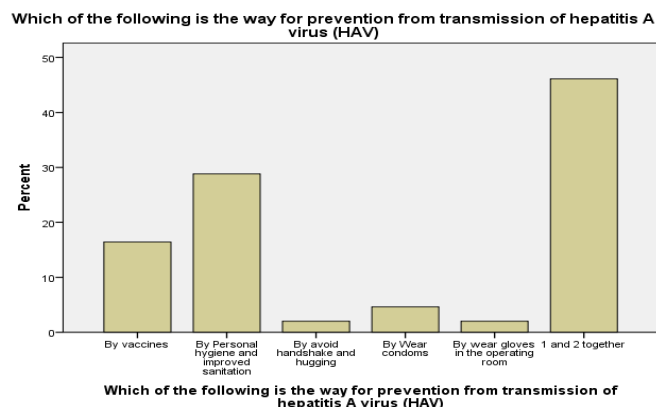


Table 5.

This table regarding to transmission of HBV		
	Frequency	Percent
By Food and Water	5	1.4
By Blood	77	21.8
By sexual contact	59	16.7
By saliva	10	2.8
Through placenta	8	2.3
2,3 and 4 together	195	55.1
Total	354	100.0

Table 5, shows the majority of the respondent (n=195) 55.1%; answers correctly about the transmission of HBV by Blood, sexual contact and saliva (Body fluids). Some of them think the transmission can occur by one thing and the percent appear like that (21.8%, 16.7% and 2.8% respectively). Less than 2.5% of them answers incorrectly about the transmission of this virus by food, water and through placenta.

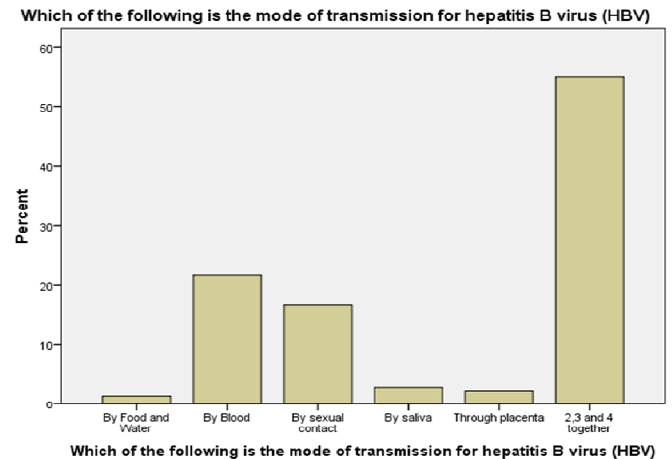


Table 6.

This table regarding to prevention of HBV			
	Frequency	Percent	Valid Percent
By vaccines	73	20.6	21.0
By Personal hygiene and improved sanitation	26	7.3	7.5
By avoid handshake and hugging	2	.6	.6
By Wear condoms	46	13.0	13.3
Use disinfectants after coming out of the bathroom	8	2.3	2.3
a 1nd 4 together	192	54.2	55.3
Total	347	98.0	100.0
Missing System	7	2.0	
Total	354	100.0	

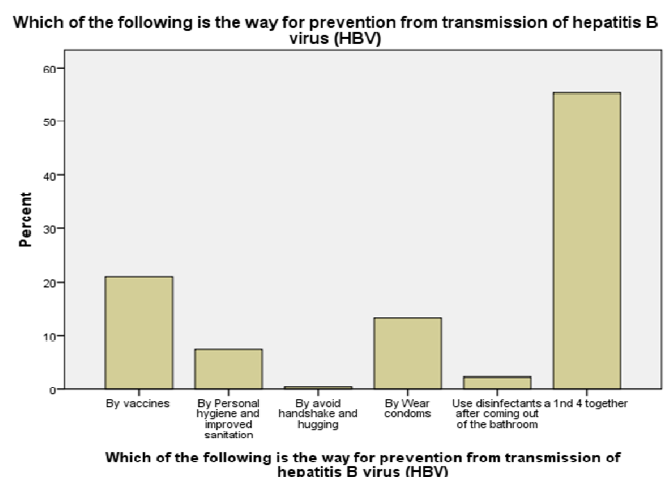


Table 6, shows the majority of the respondent (n=192) 55.3%; answers correctly about the prevention of HBV transmission by Vaccines and wear condoms. Some of them think the prevention can occur by one thing and the percent appear like that (21% and 13.3% respectively).

Just (n=26) 7.5% of them answers incorrectly about the prevention of HBV transmission by personal hygiene and improve sanitation. Less than 2.3% (n=8) of them answers the disinfectants after coming out of the bathroom can prevent the infection by this virus and that is wrong.

Table 7.

This table regarding to transmission of HCV			
	Frequency	Percent	Valid Percent
By food and Water	24	6.8	6.9
By needles and sharps	215	60.7	62.0
By handshake	5	1.4	1.4
By saliva	17	4.8	4.9
Through placenta	33	9.3	9.5
2 and 3 together	53	15.0	15.3
Total	347	98.0	100.0
Missing System	7	2.0	
Total	354	100.0	

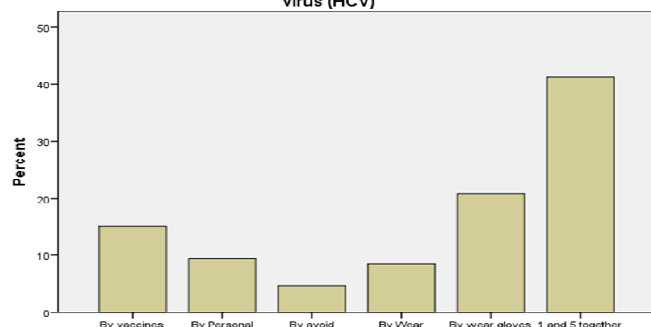
Table 7, shows the majority of the respondent (n=215) 62%; answers correctly about the transmission of HCV by needles and sharps (Blood). 53 of them (15.3%) say the transmission of HCV can occur by needles, sharps and handshake and that is wrong. Also; some of them think the transmission of HCV can occur through placenta (n=33) 9.5%; saliva n=17 (4.9%) and handshake 1.4% (n=5) also that is wrong.

Table 8.

This table regarding to prevention of HCV			
	Frequency	Percent	Valid Percent
By vaccines	52	14.7	15.2
By Personal hygiene and improved sanitation	32	9.0	9.4
By avoid handshake and hugging	16	4.5	4.7
By Wear condoms	29	8.2	8.5
By wear gloves in the operating room	71	20.1	20.8
1 and 5 together	141	39.8	41.3
Total	341	96.3	100.0
Missing System	13	3.7	
Total	354	100.0	

Table 8, shows the majority of the respondent (n=141) 41.3%; answers incorrectly about the prevention of HCV transmission by Vaccines and wear gloves in the operating room. Only (n=71) 20.8% of them answers correctly by wearing gloves in the operating room (By blood) can prevent transmission of HCV. Some of them think the prevention of HCV transmission can occur by : vaccines (n=52) 15.2%, personal hygiene and improve sanitation (n=32) 9.4%, Wearing condoms (n=29) 8.5% and avoiding handshake (n=16) 4.7% also that is wrong.

Which of the following is the way for prevention from transmission of hepatitis C virus (HCV)



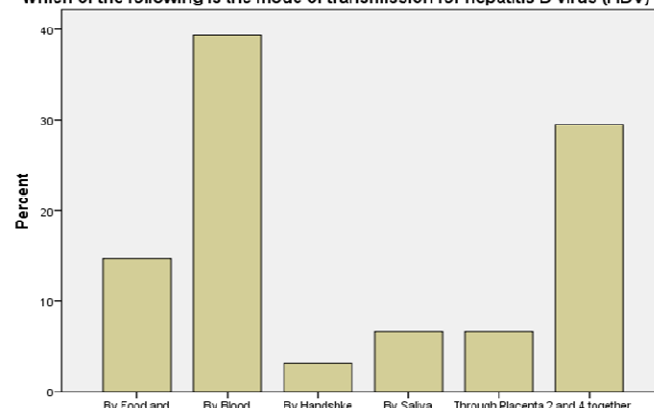
Which of the following is the way for prevention from transmission of hepatitis C virus (HCV)

Table 9, shows the majority of the respondent (n=136) 39.3%; think only the blood is the mode of transmission of HDV and this is not true. 102 (29.5%) of them answers correctly by blood and saliva (body fluid).

Table 9.

This table regarding to transmission of HDV			
	Frequency	Percent	Valid Percent
By Food and Water	51	14.4	14.7
By Blood	136	38.4	39.3
By Handshke	11	3.1	3.2
By Saliva	23	6.5	6.6
Through Placenta	23	6.5	6.6
2 and 4 together	102	28.8	29.5
Total	346	97.7	100.0
Missing System	8	2.3	
Total	354	100.0	

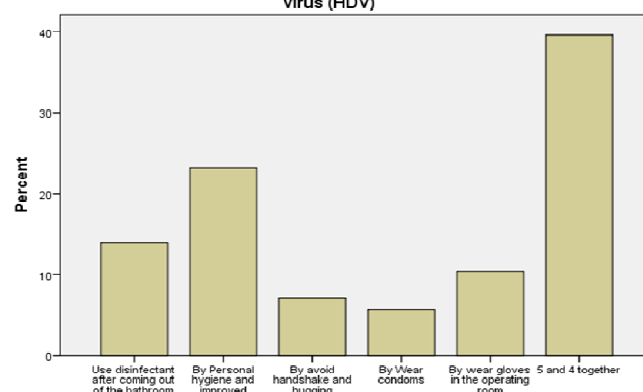
Which of the following is the mode of transmission for hepatitis D virus (HDV)



Which of the following is the mode of transmission for hepatitis D virus (HDV)

The HDV can not transmitted by food and water but 14% (n=51) of them said that can occur. Also; (n=23) 6.6% of respondent think the transmission of HDV can occur by saliva only. (6.6% and 3.2%) of them incorrectly answers through placenta and handshake respectively.

Which of the following is the way for prevention from transmission of hepatitis D virus (HDV)



Which of the following is the way for prevention from transmission of hepatitis D virus (HDV)

Table 10.

This table regarding to prevention of HDV			
	Frequency	Percent	Valid Percent
Use disinfectant after coming out of the bathroom	47	13.3	14.0
By Personal hygiene and improved sanitation	78	22.0	23.2
By avoid handshake and hugging	24	6.8	7.1
By Wear condoms	19	5.4	5.7
By wear gloves in the operating room	35	9.9	10.4
5 and 4 together	133	37.6	39.6
Total	336	94.9	100.0
Missing System	18	5.1	
Total	354	100.0	

Table 10, shows the majority of the respondent (n=133) 39.6%; answers correctly about the prevention of HDV transmission by wear condoms and wear gloves in the operating room. (23.2%, 14% and 7.1%) of them answers incorrectly by personal hygiene and improve sanitation, use disinfectant after coming out of the bathroom, avoid handshake and hugging respectively can prevent transmission of HDV. (10.4% and 5.7%) of them think the prevention can be done only by wear gloves in the operating room or wear condoms respectively.

Table 11.

This table regarding to transmittion of HEV			
	Frequency	Percent	Valid Percent
By Food and water	107	30.2	30.9
By Blood	57	16.1	16.5
By Sexual Contact	23	6.5	6.6
By saliva	16	4.5	4.6
Through placenta	27	7.6	7.8
1 and 4 together	116	32.8	33.5
Total	346	97.7	100.0
Missing System	8	2.3	
Total	354	100.0	

Table 11, shows the majority of the respondent (n=116) 33.5%; incorrectly answers about transmission of HEV by food, water and saliva. 107 (30.9%) of them answers correctly by Food and water. The HEV cannot transmitted by Blood, through placenta, sexual contact and saliva but (16.5%, 7.8%, 6.6% and 4.6% respectively) of them said that can occur.

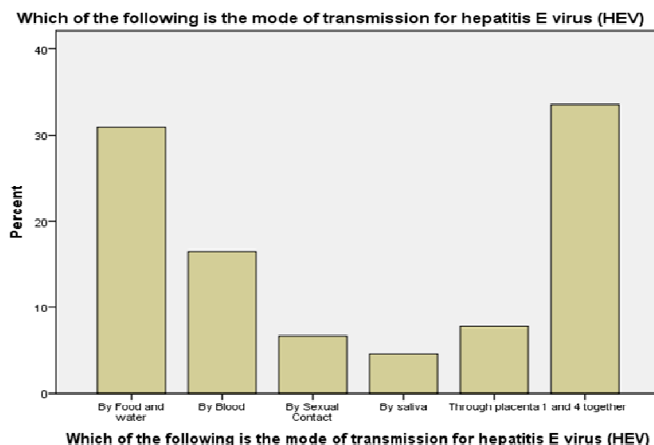


Table 12.

This table regarding to prevention of HEV			
	Frequency	Percent	Valid Percent
By vaccines	47	13.3	14.0
By Personal hygiene and improved sanitation	126	35.6	37.5
By avoid handshake and hugging	15	4.2	4.5
By Wear condoms	13	3.7	3.9
By saliva	21	5.9	6.3
1, 2 and 4 together	114	32.2	33.9
Total	336	94.9	100.0
Missing System	18	5.1	
Total	354	100.0	

Table 12, shows the majority of the respondent (n=126) 37.5%; answers correctly about the prevention of HEV transmission by personal hygiene and improve sanitation. But the 33.9% (n=114) of them had a misconception about the

HEV prevention and said can occur by vaccines and wear condoms add to the personal hygiene and improve sanitation. (14%, 6.3%, 4.5% and 3.9%) of the respondent answers incorrectly by vaccines, saliva, avoid handshake and hugging and wear condoms respectively.

Table 13.

This table regarding to prevention of HEV			
	Frequency	Percent	Valid Percent
By vaccines	47	13.3	14.0
By Personal hygiene and improved sanitation	126	35.6	37.5
By avoid handshake and hugging	15	4.2	4.5
By Wear condoms	13	3.7	3.9
By saliva	21	5.9	6.3
1, 2 and 4 together	114	32.2	33.9
Total	336	94.9	100.0
Missing System	18	5.1	
Total	354	100.0	

Table 13, shows the majority of the respondent (n=131) 38.2%; know the HCC commonly occur in HBV and HCV but do not know this cancer also can occur in HDV; Only 18.4% (n=63) know that. (19.8%, 10.8% and 5.5%) of them know that can occur in HBV, HCV or HDV respectively. The 7.3% (n=25) on them answers incorrectly about the occurrence of HCC and said this can occur in HAV and HEV.

Table 14.

This table regarding to preence of vaccine and treatment for each type oh these viruses	Frequency		Percent	
	√	x	√%	x%
There is effective vaccine for HAV	233	105	68.9	31.1
There is effective vaccine for HBV	269	69	79.6	20.4
There is effective vaccine for HCV	155	179	46.4	53.6
There is effective vaccine for HDV	124	210	37.1	62.9
There is effective vaccine for HEV	116	218	34.7	65.3
There is special effective treatment for HAV	217	115	65.4	34.6
There is special effective treatment for HBV	202	133	60.3	39.7
There is special effective treatment for HCV	158	175	47.4	52.6
There is special effective treatment for HDV	168	164	50.6	49.4
There is special effective treatment for HEV	178	155	53.5	46.5

Table 14, shows the (68.9% and 79.6%) of the respondent know the HAV and HBV respectively have effective vaccines. Also; (53.6%, 62.9% and 65.3%) of them know the HCV, HDV and HEV respectively have not vaccines.

But only (34.6%, 39.7%, 53.5%, 49.4% and 46.5%) of them know the Hepatitis A, B, C, D and E respectively have not special effective treatment.

Table 15, shows the (95.8%, 92.9%, 87.6%, 93.2%, 88.4%, 79.4%, 72.1% and 84.2%) of the respondent had good attitudes about use gloves at use the needles and sharps, increase personal knowledge about the mode of transmission, Conduct vaccination campaigns for children, premarital screening, disinfectants using after coming out of the bathroom, refrain from eating and drinking everything Exposed, frequent check to make sure of safety and medical examinations on each restaurants workers and prefectures in your home respectively.

Table 15.

This table regarding to the Attitude Toward viral hepatitis	Frequency			Percent		
	Agree	Not sure	Not agree	Agree%	Not sure%	Not agree%
Should be use gloves when we use the needles and sharps for prevention for spread of som kined of viral hepatitis	322	11	3	95.8	3.3	0.9
Should be know how these viruses can transmitted and avoid happened these factors with you or others	315	23	1	92.9	6.8	0.3
Should be do vaccination campaigning for all child to prevent them from these viruses	296	33	9	87.6	9.8	2.7
should check out before marriage (premarital screening)	316	22	1	93.2	6.5	0.3
You should use disinfectants after using the bathroom	296	35	4	88.4	10.4	1.2
You should refrain from eating food and drinking water exposed	266	61	8	79.4	18.2	2.4
You should conduct frequent check on you and your family to make sure of safety of these viruses	240	82	11	72.1	24.6	3.3
Medical examinations should be conducted on esch restaurants workers and prefectures in your home	283	50	3	84.2	14.4	0.9
Should be isolate who know had this virus	171	98	66	51	29.3	19.7

Table 16.

This table regarding to the Practice toward viral hepatitis	Frequency		Percent	
	Yes	No	Yes%	No%
Are you use disinfectant after use bathroom	200	131	60.4	39.6
Are you take enough distance when you talking with patient have this virus	152	173	46.8	53.2
Are you go to presence of tarriff conferences for these viruses or disease	64	269	19.2	80.8
Do you know what the procedures you need when communicating with people infected with the virus	151	156	49.2	50.8
If you say yes; Are you do this procedures	114	64	64	36
Can you prevent your self from these viruses	145	135	51.8	48.2
Do you take a vaccine against any kined of these viruses	204	99	67.3	32.7

But 51% of them had bad attitudes to patients with this viruses and said should be isolated them.

Table 16, shows the 60.4% of the of the respondent use disinfectant after use bathroom, 53.2% do not make distances when they talking with patient have this virus, Only 19.9% of them go to presence of tarriff conferences for these viruses or disease, 49.2% of them know the procedures need when communicating with people infected with the virus and 64% of them do it this procedures. Up to 52% of them can prevent themselves from these viruses. And 67.3% of them had vaccination against hepatitis A and B.

DISCUSSION

Generally; the medical students have poor Knowledge about viral hepatitis (46.92%).

But in specific way :They have moderate awarness about HB transmission and prevention. Also about mode of transmission and treatment of HC. Most of them know about availability of vaccines in any types. They have a good attitudes about use gloves at use the needles and sharps, increase personal knowledge about the mode of transmission, Conduct vaccination campaigns for children, premarital screening, disinfectants using after coming out of the bathroom, refrain from eating and drinking everything Exposed, frequent check to make sure of safety and medical examinations on esch restaurants workers and prefectures in your home. But only 19.7% of them had good attitudes to patients with this viruses and said should not be isolated them. Most of the of the respondent use disinfectant after use bathroom, do not make distances when they talking with patient have this virus, know the procedures need when communicating with people infected with the virus and can prevent themselves from these viruses. A few of them go to presence of tarriff conferences for these viruses or disease. Up to 70% of them had vaccination against hepatitis A and B. This study showed that students have poor

knowledge about viral hepatitis. These findings were parallel with previous conducted research in Quetta city in Pakistan and Zahedan university.(Norman Al-Haq *et al.*, 2012; Ansari *et al.*, 2008) Unlike that appear in india.(Sudhakara Reddy *et al.*, 2011) About transmission of hepatitis B the knowledge showed moderate unlike the study conducted in sudan and southern Negeria. (Bakry *et al.*, 2012; Samuel *et al.*, 2009) But about vaccines; most of them are vaccinated like the same study in southern Negeria, Karashi; Pakistan and Gauteng Province (Samuel *et al.*, 2009; Nazeer Khan *et al.*, 2010; Mokonoto, 2010) and unlike that in sudan(Bakry *et al.*, 2012) Also showed them with good awareness about prevention and vaccination of hepatitis B. The same result fined in Karashi; Pakistan and Gauteng Province.(Nazeer Khan *et al.*, 2010; Mokonoto, 2010) A moderate knowledge showed in this study about transmission of Hepatitis B and C. The same result showed in Karashi;Pakistan and jazan university in 2012 on frist year of medical scinse.(Nazeer Khan *et al.*, 2010; Zaki M. Eisa *et al.*,2012) In the same collage in jazan university in 2012 on first year of medical scinse study conducted and shwed poor or low percentage about their attitude. (Zaki M. Eisa *et al.*, 2012) Unlike that appear in this study. But in Al-Kuwait; a good percentage showed about transmission and prevention of HC (Suhair *et al.*, 2012) Unlike that showed in this study. Only 19.7% of respondents said the patients should not be isolate. Unlike that in Karashi; Pakistan (74%) (Nazeer Khan *et al.*, 2010)

Conclusion

Generally; In this study we conclude the knowledge of medical students were poor reverse they attitude. The male are knowledgable than female, but in attitude the female have a good attitude than male. But not a big difference. Also; The knowledge increased relatively with level of education. But the attitude appear between (70% to 85%) in all level of education of male and female. Most of them are vaccinated against HB. The majority in 4th to 6th year. Hepatitis being a very important

health problem affecting almost 10% of the population requires a very serious planning to combat its risks factors. A carefully designed strategy with multiple educational approaches directed to all strata of population has to be devised at an early stage. Students are one of the best groups to be addressed for health education regarding Hepatitis who could then act as resource of their families. Now we recommend that lectures and awareness leaflets and posters for students at Jazan University to increase awareness. And also prefer to make sure students who did not take the vaccination, especially against hepatitis B in advanced years.

REFERENCES

- Ali Kabir, Seyed Vahid Tabatabaei, Siamak Khaleghi, Shahram Agah, Amir Hossein Faghihi Kashani, Mehrdad Moghimi, Fahimeh Habibi Kerahroodi, Seyed-e-Hoda Alavian, and Seyed Moayed Alavian. Knowledge, Attitudes and Practice of Iranian Medical Specialists regarding Hepatitis B and C. 2010 summer; 10(3): 176–182.
- al-Ruhaimi KA. Response of dental professionals in Saudi Arabia towards hepatitis B vaccine and glove wearing. 1991 Jun; 14(2): 24-8.
- Amir Razi, Rameez ur Rehman, Saima Naz, Farkhanda Ghafoor and M. Aman Ullah Khan. Knowledge attitude and practices of university students regarding hepatitis B and C. ISSN 1990-6145 VOL. 5, NO. 4, JULY 2010
- Ansari, H., G.R. Masoudi, F. Rakhshani, F. Kord-Mostafapour and A. Arbabi-Sarjo, 2008. Assessment of Knowledge of Students of Zahedan University of Medical Sciences about Viral Hepatitis Infections and Related Factors. *Journal of Medical Sciences*, 8: 62-67. DOI: 10.3923/jms.2008.62.67
- Ayranci U, Kosgeroglu N. Needlestick and sharps injuries among nurses in the healthcare sector in a city of western Turkey. 2004 Nov; 58(3):216-23.
- Bakry SH, Mustafa AF, Eldalo AS, Yousif MA. 2012. Knowledge, attitude and practice of health care workers toward Hepatitis B virus infection, Sudan. 24(2): 95-102. Doi: 10.3233/JRS-2012-0558.
- Kosgeroglu, N., U. Ayranci, E. Vardar Eli and S. Dincer, 2004. Occupational exposure to hepatitis infection among Turkish nurses: Frequency of needle exposure, sharps injuries and vaccination. *Epidemiology. Infect.* 132: 27-33
- Majid S Al-Thaqafi, Hanan H Balkhy, Ziad Memish, Yahya M Makhdom, Adel Ibrahim, Abdulfattah Al-Amri, and Abdulkakeem Al-Thaqafi. Improvement of the low knowledge, attitude and practice of hepatitis B virus infection among Saudi National Guard personnel after educational intervention. 2012; 5: 597. Doi: 10.1186/1756-0500-5-597
- Mrs. MD Mokonoto. Knowledge, attitudes and practices regarding the prevention of hepatitis b virus infections, in final year college student nurses in Gauteng province. February 2010.
- Myers JE, Myers R, Wheat ME, Yin MT. Dental students and bloodborne pathogens: occupational exposures, knowledge, and attitudes. 2012 Apr; 76(4): 479-86.
- Nazeer Khan, Sheikh Munir Ahmed, Muhammad Masood Khalid, Sarah Hasan Siddiqui, Ayesha Altaf Merchant. Effect of gender and age on the knowledge, attitude and practice regarding Hepatitis B and C and vaccination status of Hepatitis B among medical students of Karachi, Pakistan. Vol. 60, No. 6, June 2010.
- Norman Al-Haq, Mohamed Azmi Hassali, Asrul A Shafie, Fahad Saleem, Maryam Farooqui, and Hisham Aljadhey. 2012. A cross sectional assessment of knowledge, attitude and practice towards Hepatitis B among healthy population of Quetta, Pakistan. 12: 692. Doi: 10.1186/1471-2458-12-692
- Paul T, Maktabi A, Almas K, Saeed S. Hepatitis B awareness and attitudes amongst dental health care workers in Riyadh, Saudi Arabia. 1999 Jun; 22(86): 9-12.
- Paul T. Self-reported Needlestick injuries in dental health care workers at Armed Forces Hospital Riyadh, Saudi Arabia. 2000 Mar; 165(3): 208-10.
- Phillips EK, Simwale OJ, Chung MJ, Parker G, Perry J, Jagger JC. Risk of blood borne pathogen exposure among Zambian healthcare workers. 2012 Jun; 5(3): 244-9. Doi: 10.1016/j.jiph.2012.02.005. Pub 2012 Apr 12.
- Prodanovska-Stojcevska V, Isjanovska R, Popova-Ramova E. Knowledge of HCV infection among nursing students of the Medical College of Bitola. 2010 Jun; 61(2): 197-201. Doi: 10.2478/10004-1254-61-2010-1990.
- Samuel, S. O., S. A. Aderibigbe, T. A. T. Salami and O. A. Babatunde. Health workers' knowledge, attitude and behaviour towards hepatitis B infection in Southern Nigeria. ISSN 2006-9723 Vol. 1(10). Pp. 418-424, October 2009.
- Sharma, S., A Gupta, An Arora. Knowledge, attitude and practices on needle-stick and sharps injuries in tertiary care cardiac hospital: A survey. 20-Sep-2012 DOI: 10.4103/0019-5359.101174
- Soad A. Habiba, Ghadeer A. Alrashidi, Afaf E.M. Al-otaibi, Ghizayel R. Almutairi, Gamal Makboul and Medhat K. El-Shazly. Knowledge, attitude and behavior of health care workers regarding hepatitis B infection in primary health care, Kuwait. ISSN: 2276-7797 Vol. 2 (4), pp. 077-083, August 2012.
- Sudhakara Reddy, R., L. A. Swapna, T. Ramesh, K. Pradeep. 2011. Knowledge, attitude and practice on hepatitis B prevention among dental professionals in India. October | December, Volume 10, Number 4
- Suhair A. Yaghi, Ebtihal S. Al-Habib, Alia A. Sadik, Ghizayel R. Almutairi, Gamal Makboul and Medhat K. El-Shazly. Knowledge, attitude and behavior of primary health care workers about hepatitis C, Kuwait. ISSN: 2276-7797 Vol. 2 (4), pp. 084-091, August 2012.
- Vitale F, Di Benedetto MA, Casuccio A, Firenze A, Calandra G, Ballarò F, Romano N. [The influence of professional degree on the knowledge of HIV, HBV and HCV infections in dentistry practice]. 2005 May-Jun; 17(3): 185-96.
- WHO. Hepatitis A [Online] Available at: <http://www.who.int/mediacentre/factsheets/fs328/en/index.html> [Accessed 27/3/2013]
- WHO. Hepatitis A [Online] Available at: <http://www.who.int/topics/hepatitis/en/index.html> [Accessed 27/3/2013]
- WHO. Hepatitis B [Online] Available at: <http://www.who.int/mediacentre/factsheets/fs204/en/index.html> [Accessed 27/3/2013]
- WHO. Hepatitis C [Online] Available at: <http://www.who.int/mediacentre/factsheets/fs164/en/index.html> [Accessed 27/3/2013]
- WHO. Hepatitis D [Online] Available at: <http://www.who.int/csr/disease/hepatitis/whoocdsrncs20011/en/index4.html> [Accessed 27/3/2013]

WHO. Hepatitis E [Online] Available at: <http://www.who.int/mediacentre/factsheets/fs280/en/index.html> [Accessed 27/3/2013]
Wikipedia, Liver [Online] Available at: <http://en.wikipedia.org/wiki/Liver> [Accessed 27/3/2013]

Zaki M. Eisa , Saleh A. Eifan, Basheer A. Al-Sum. Awareness of Viral Hepatitis B and C Infection among First Year Medical Sciences Students in Jazan University. 2012; 2(5): 167-173. Doi: 10.5923/j.phr.20120205.09
