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KNOWLEDGE, ATTITUDE AND PRACTICE IN NURSING STUDENT TOWARD PATIENTS WITH HEPATITIS C

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ABSTRACT

Viral hepatitis is a liver disease which is associated inflammation of liver and in many cases permanent damage of liver tissue. It is a serious health concern and one of the most important infectious leading causes of death worldwide **(Razi et al, 2010)**. Having enough knowledge and proper attitude towards patients with virus (HCV) infection are cornerstones of preventing the spread of the disease while, lack of knowledge and awareness about Hepatitis C in the community often leads to misinformation , missing of opportunities for prevention and treatment, and stigmatization of infected populations in the work place, by family members and by members of their communities.

Aim: : The aim of the study was to assess knowledge , attitude and practice in nursing student toward patient with Hepatitis C

Material and Method: Descriptive correlation study design. The study was conducted at faculty of nursing at Minia University and convenience sample of 100 nursing, fourth year student who training in university hospital during different practical courses was enrolled in the study. Specially designed questionnaires that were developed by the researcher based on **(TalpurA.,2007),** after reviewing the related literature. Its consisted of three parts include question related to Socio- demographic data question related to fourth year nursing student, level of knowledge , and question related to side effect of hepatitis C treatment . **Results** the present study, indicated that nursing student ' overall knowledge score is moderate and there was a significant correlation among nursing student ' attitude and their total level of knowledge toward patients with hepatitis C in a way that higher knowledge is associated with better attitude.

Conclusion: There was a significant correlation among nursing interns 'attitude and their total levels of knowledge toward patients with hepatitis C.

Recommendation: It is recommended that continuing education programs are needed to increase awareness of hepatitis C virus in various risk groups in our country. Also replication of the study on a larger probability sample from different geographical areas should be done to achieve more generalize.

Key words: Hepatitis C, knowledge, attitude, practice nursing student.

Introduction

Hepatitis Causes a form of liver inflammation and is a highly infectious blood borne disease. There are six major genotypes of the hepatitis C virus (HCV) –type1-6, which include subtype a-e. Acute hepatitis C, which represents the first six months of infection, is self- resolving in 20% of cases but does not confer permanent immunity. The majority of infected people are unaware of their HCV positive status due to lack of disease specific symptoms and go on to develop chronic hepatitis **(Ryan, K.J., etal.,2007).**

Chronic infection is associated with variable degrees of hepatic inflammation and fibrosis progression, regardless of HCV genotype and viral load. Only exceptionally does it, resolve spontaneously , people chronically infected are at increased risk of developing fibrosis , cirrhosis, hepatocellular carcinoma and end – stage liver disease (BA SL,2011). Symptoms of chronic infection can include tiredness, fever, headaches, flu-like symptoms, depression, insomnia, pain and digestive disorders, which can be attributed to other illnesses. This represents a challenge as many infected people do not feel the need to be tested for the disease and remain undiagnosed . Although no vaccine is available, the disease is preventable and can be successfully treated and cured in around half of clients, avoiding complicated and costly healthcare interventions and premature death **(Tiftikci etal.,2009)**. Viral hepatitis leads to at least one million deaths in the world yearly .There are six common known types of hepatitis viruses (A, B, C, D, E and G) **(Ramsay et al., 2007)**.Hepatitis B and C Viruses are two common causes of chronic liver disease and permanent liver damage **(Bukhari, et al, 2000)**.Hepatitis C virus infection appears to be endemic in most parts of the world and about 3.3 percent of the world population (200 million people) are infected with Hepatitis C virus **(Wands. 2004).**

WHO estimates that about 170 million people, 3%of the world population, are infected with HCV and 3-4 million person are newly infected each year **(Yaghi. 2010)**. Egypt has the highest HCV prevalence worldwide and is the most significant public health problem facing Egypt today. The prevalence rate ranges from 10%-20%of the general population. High rates of infection are observed among all age groups although there are regional differences in the average overall prevalence, rural populations show a higher prevalence than urban ones. Liver disease is a top cause of mortality in Egypt, and mathematical models predict an upsurge in cases of liver cirrhosis and liver cancer in the years to come **(Hassan et al., 2011)**.

HCV is spread primarily by direct contact with human blood. Transmission through blood transfusions that are not screened for HCV infection, through the reuse of inadequately sterilized needles, syringes or other medical equipment especially in dental treatment, or through needle-sharing among drug-users, is well documented. Other modes of transmission through social, cultural, and behavioral practices using percutaneous procedures (e.g. ear and body piercing, circumcision, tattooing) can occur if inadequately sterilized equipment's are used. Sexual and prenatal transmission may also occur, although less frequently. HCV is not spread by sneezing, hugging, coughing, food or water, sharing eating utensils or casual contact, although there are household contacts with unexplained HCV infection **(Kabir et al., 2010)**.

In Egypt, HCV is epidemic due to use of unsterile injection equipment during mass treatment of the general population with parenteral antischistosomal therapy. Nevertheless, children and young adults have relatively high anti- HCV prevalence, but still less than that in the older population group. This situation suggests that HCV transmission continues in the country **(Eassa et al., 2007)**.

HCV infection is commonly referred to as the — silent epidemic because there are no symptoms in the initial stages of the disease and as a consequence, many people infected may still be unaware of their status. Unlike other viral forms of hepatitis, the acute phase is rare **(Mansour etal., 2009)**. The chronic form, presenting scarce and non-specific symptoms include such as fatigue, irritability, nausea, anorexia, muscle pains, headaches, abdominal discomfort and articular pain, makes clinical diagnosis of the disease difficult. The infection lasts for decades for a person to develop serious complications due to chronic HCV is usually slowly progressive **(Van. 2002)**. Additionally, there is no vaccine to prevent HCV infection, and immune-globulin is not effective for post exposure prophylaxis. Furthermore, HCV infected people serve as a reservoir for transmission of infection to others if left untreated. **(Basal et al., 2011).**

Having enough knowledge and proper attitudes towards these HCV infections are cornerstones of preventing the spread of them. While, lack of knowledge and awareness about Hepatitis C in the community often leads to misinformation, missing of opportunities for prevention and treatment, and stigmatization of infected populations in the work place, by family members and by members of their communities. The consequences for members of at-risk communities are important in that missing opportunities for prevention can lead to infection of additional people with HCV **(Basal et al., 2011)**.

Health staff and nursing student have the most important role in preventing the disease by improving the disease knowledge among them and the patients because nursing student are in close contact with hepatitis patients during their studying and after and afterwards **(Ghahramani et al., 2006)** .The nursing student are future nurse staff therefore we studied their knowledge levels toward treating people with hepatitis C to stop the spread of disease in hospitals and society, also investigate how can be influenced by education and how this can affect their willingness to treat these patients **(Ball et al., 2008)**.

Aim of the study:

The aim of the study is to assess knowledge, attitude and practice of nursing student toward patient with Hepatitis C

Subject and Method

Design: Descriptive correlation study design.

Setting: The study was conducted at faculty of Nursing, Minia University hospital

Subjects: The study subjects consisted of convenient sample of 100 nursing, fourth year student who training in university hospital 2011-2012.

Tools for data collection:

It was developed by the researchers based on **(Joukor etal., tool 2011)**, Van de **(Mortal etal., 2003)**, and (Yaghi etal.,(2010) after reviewing the related literature. Then the modification and adaptation was based on the aim of the study,

It consisted of three parts:

First part: Fourth Nursing Student sociodemographic data: age, sex, marital status, residence, family history of hepatitis C.

Second part: Statements to asses level of knowledge among nursing student about hepatitis C divided into four parts:-

Part (1):- General knowledge about hepatitis C. 12 statements
Part (2):- Routes of transmission of hepatitis C. 11 statements
Part (3):- Ways of preventing Hepatitis C infection. 7 statements
Part (4):- Measures taken to protect against hepatitis C infection. 6 statements

Scoring system of the second part of statement to ass's level of knowledge:

Each statement was measured on a two point Likert scale. 0 = wrong or don't know and 1= right.

- For the first part, the total right answer equal 12 point. The level of right answer divided into three levels. Poor level range from 1-4, moderate level range from 5-8, and good level range from 9-12.
- For the second part, the total right answer equal 11 point. The level of right answer divided into three levels. Poor level range from 1-3, moderate level range from 4-6, and good level range from 7-11.
- For the third part, the total right answer equal 7 point. The level of right answer divided into three levels. Poor level range from 1-2, moderate level range from 3-4, and good level range from 5-7.
- For the fourth part, the total right answer equal 6 point. The level of right answer divided into three levels. Poor level range from 1-2, moderate level range from 3-4, and good level range from 5-6.

Total scoring of total levels of knowledge equal 36 points, it was divided into three levels. Poor level range from 1-12, moderate level range from 13-24, and good level range from 25-36.

The third part of tool:

Followed by a Likert scale consisting of 17 statements on attitudes and practices in relation to HCV, some of the questions in the attitudes and practices section

Scoring system of the third part of the nursing student attitude , practice regarding patients with hepatitis C.

The nursing student attitude and practice were measured used three point likert scale, strongly agree=3 , agree=2 and strongly disagree, not agree= 1. Total score of attitude and practice considered positive attitude if the total score equal more than 27 point (equal 60%) and considered negative attitude if the total score less than 27 point .

Method:

Ethical& administration considerations:-

1- An official permission to carry out the study was obtained from responsible authorities at Faculty of Nursing at Minia University.

2- The purpose of the study was explained to the nursing student and their oral consent to participate was received and those who were willing to participate were given a questionnaire to answer it.

Statistical analysis

The collected data were organized, tabulated and statistically analyzed using statistical package for social studies (SPSS) version 16. Descriptive measures, including frequency, percentage, mean and standard deviation were presented.

T test were used for statistical correlation. P value was statistically significant at level 0.05%.

Results

Table 1: Socio - demographic characteristics of the nursing Student.

Variables	No	%
Age in years		
< 21	10	10%
21	65	65%
> 21	25	25%
Gender		
Male	10	10%
Female	90	90%
Marital Status		
Single	100	100%
Residence		
Urban	45	45%
Rural	55	55%
Total	**100**	**100%**

Table (1): Shows the percent distribution of socio-demographic characteristics of the nursing student It was noticed that 65% had 21 years old. 90% were female, 95% were single, and 55% were from rural areas of them.

Table 2: Proportion of nursing student answered correctly statements regarding general knowledge and routs of transmission

Variables	No	%
General Knowledge		
1- Hepatitis c is caused by virus	92	92
2- Hepatitis c is caused by bacteria	78	78
3- Hepatitis c is a seriousness of the disease	68	68
4- Hepatitis c can lead to Cirrhosis	71	71
5- Hepatitis c is associated with an increased risk of liver cancer	74	74
6- Hepatitis c is a mutation of hepatitis B	43	43
7-A person can be infected with hepatitis c and not have any symptoms of the disease	59	59
8-These is a pharmaceutical treatment available for hepatitis C	52	52
9-HIV is easier to catch than hepatitis C	50	50
10- An individual can have hepatitis C antibodies without being currently infected with the virus.	29	29
11-People with hepatitis Should restrict their alcohol intake	59	59
12-Once the patient had hepatitis C, cannot catch it again because he was immune	35	35
Routs of Transmission of hepatitis C		
13- Blood and blood products	71	71
14- Needles and sharps	66	66
15- Sexual intercourse	24	24
16- Faeco – oral	57	57
17- Close personal contact such as kissing	60	60
18- Contaminated water	63	63
19- By mosquitoes	51	51
20-Through the air in an enclosed environment	62	62
21-Hepatitis C can be transmitted as a nosocomial infection	54	54
22-Hepatitis C is also widely transmitted like HIV/ AIDS	57	57
23- Health workers are at risk of Hepatitis C infection by virtue of their work	67	67
Total	100	100

Table (2): Shows the proportions of the nursing student with correct knowledge about each items in the different domains regarding HCV. Regarding to their general knowledge, it revealed that 92% of them were aware that hepatitis C infection caused by a virus, 78% considered hepatitis C a seriousness disease68% knew that hepatitis C can lead to cirrhosis. About 74% knew that hepatitis C was associated with an increased risk of liver cancer, while only 59% aware that the person can be infected with hepatitis C and not have any symptoms of the disease and 52% knew there was a pharmaceutical treatment available for hepatitis C. Also, 59% knew that people with hepatitis C should restrict their alcohol intake. Only 35% aware that once the patient had hepatitis C cannot catch it again because he was immune. Generally, the level of knowledge about modes of transmission was high among the majority of the nursing student. Correct knowledge about blood and blood products as well as needles and sharp objects as modes of transmission were (71% and 66% respectively). While, 54% considered that hepatitis C can be transmitted as a nosocomial infection, 57% knew that hepatitis C is also widely transmitted like HIV/AIDS, and 67% knew that health workers are at risk of HCV infection by virtue of their work.

Table 3: Proportion of nursing student answered correctly statements regarding ways of preventing and measures taken to protect against hepatitis C infection.

Ways of preventing Hepatitis C infection	No	%
24- Vaccination	53	53
25- Proper disposal of sharps, needles and blood	68	68
26- Avoid needle / sharps injury	68	68
27- Avoid causal sex and multiple sexual partners	60	60
28- Avoid drinking contaminated water	53	53
29-Avoid food well cooked	48	48
30- People with hepatitis C should be restricted from working in the food industry	30	30
Measures taken to protect against hepatitis C infection		
31-Wearing of gloves	68	68
32- Wearing of goggles	61	61
33- Adequate disposal of sharps	65	65
34-Avoid patients diagnosed with hepatitis B	28	28
35- Multivitamin / blood tonic	27	27
36- Use antibiotic after contact	29	29
Total	100	100

Table (3): Shows also the proportions of the nursing student with correct knowledge about each items in the different domains regarding HCV. When the nursing students asked about ways of preventing HCV infection; 53% knew that vaccination against hepatitis C is a way of prevention. However, more than half of the nursing student answered correctly about the main preventing ways, where 68%, 68% and 60% respectively knew that proper disposal of sharps, needles and blood avoiding needle/sharps injury, and avoiding casual sex or/and multiple sexual partners are ways of prevention of the infection. Concerning nursing student ' knowledge regarding measures taken to protect against hepatitis C infection, (68% and 61%, respectively) agreed that wearing of gloves and goggles protect against infection. While, 65% agreed that adequate disposal of sharps protect against infection.

Table 4: Proportion of nursing student responses to the attitudes and practices statements

Statement	Strongly disagree	Not agree	Agree	Strongly agree
37- I frequently worry about acquiring hepatitis C because of my work	13.8	60%	20%	3%
38- Our profession has a responsibility to treat people infected with hepatitis C	2%	8%	45%	42%
39- I prefer an exciting , unpredictable life	19%	57%	10%	6%
40- I try to avoid looking after patients infected with hepatitis	29%	59%	3%	5%
41- My risk of becoming infected with hepatitis C through my work is low	12%	40%	36%	8%
42- It is not necessary for patients to undergo mandatory testing for hepatitis C upon admission to hospital	6%	46%	30%	13%
43- All patients undergoing surgery should be tested for hepatitis C to protect the staff looking after them	2%	44%	37%	13%
44- I enjoy taking risks in life	22%	54%	17%	1%

45- Patients who know that they have hepatitis C should disclose their infective status to the people caring for them	5%	19%	42%	29%
46- I use standard precautions to protect myself whenever I suspect I might be exposed to body fluids	0%	2%	50%	45%
47- The way the patient caught hepatitis C influences the way I treat him/ her.	36%	51%	5%	2%
48- When looking after a patient with hepatitis C, I try to spend as tittle time with them as possible	25%	66%	5%	0%
49- If I know someone has hepatitis C,I treat them differently to other patients.	30%	61%	3%	0%
50- I have no problem looking after someone with hepatitis C regardless of how they caught the disease	2%	6%	62%	25%
51- Touching someone infected with hepatitis C doesn't make me uncomfortable	1%	27%	47%	20%
52- I can't always follow standard precautions because my patient's needs come first	27%	63%	3%	3%
The infection control guidelines necessary to treat patients with hepatitis C would be a financial burden on my practice/ ward	12%	21%	24%	38%

Table (3): Presents nursing student Proportion of nursing student responses to the attitudes and practices statements and self-reported behavior, 60% of the nursing student not agree worry about acquiring hepatitis C because of my work, 45% agree- Our profession has a responsibility to treat people infected with hepatitis C While, (57%& 59 % and 40%) of them had not agree attitude regarding that prefer an exciting unpredictable life ,avoid looking after patients infected with hepatitis and regarding to risk of becoming infected with hepatitis C through my work is low. Also(46%,44% & 54%)regarding attitude, It is not necessary for patients to undergo mandatory testing for hepatitis C upon admission to hospital, all patients undergoing surgery should be tested for hepatitis C to protect the staff looking after them and I enjoy taking risks in life . Also(42%, 50%) of the student nurse agree about - Patients who know that they have hepatitis C should disclose their infective status to the people caring for them and use standard precautions to protect myself whenever I suspect I might be exposed to body fluids. Also(51% , 66% & 61%) of the nursing student not agree about The way the patient caught hepatitis C influences the way I treat him/ her, When looking after a patient with hepatitis C, I try to spend as title time with them as possible and If I know someone has hepatitis C,I treat them differently to other patients .Also, (62%& 47%) of nursing student agree about have no problem looking after someone with hepatitis C regardless of how they caught the disease Touching someone infected with hepatitis C doesn't make me uncomfortable.63% of nursing student not agree about - I can't always follow standard precautions because my patient's needs come first. Finally 38% of the nursing student strongly agrees to follow infection control guidelines will protect them from being infected with hepatitis C at work

Table 5: Correlation between nursing student' attitude& practice and their total levels of knowledge toward patient with hepatitis C.

Total levels of knowledge score (Total score=36)	General attitude	
	Negative (n=49)	Positive (n=51)
Poor (1-12)	65.30%	34.70%
Moderate (13-24)	58.70%	41.30%
Good (25-36)	26.80%	73.20%
T	2.747	
P	0.000*	

*Significant p<0.05

Table (5): Demonstrates the correlation between nursing student attitudes& practice and their total level of knowledge toward patient with hepatitis C . It was observed that there was a significant correlation among nursing student attitude, practice and their total level of knowledge toward patients with hepatitis C.

Discussion

The hepatitis C virus (HCV) is a blood-borne disease that attacks the liver. Many people do not know they are infected because there are no symptoms in the initial stages of the disease. However, hepatitis C can slowly progress to cirrhosis will go on to develop liver failure or other complications of cirrhosis, including liver cancer (Aboushady etal., 2001) or life threatening esophageal varices and gastric varices. Hepatitis C is a serious infection of the liver caused by the hepatitis C virus, a blood borne pathogen. An estimated 4.1 million Americans have been infected with HCV, of whom 3.2 million are chronically infected. Hepatitis C is becoming a bigger and more dangerous problem than hepatitis B (CDC, 2008).

The present study indicated that nursing student ' overall knowledge score is moderate (the overall percentage score was 60.5%). Our result is contrast to the study conducted by (Mansour-Ghanaei etal, 2009), who found that the mean knowledge level of the medical students is relatively low toward HCV infection. This goes in the line with (Joukar et al, 2011), who found that the mean knowledge level score was acceptable. In a survey by(Ahmadi et al., 2007), on health care workers' knowledge and attitude toward Hepatitis B, the knowledge of the majority of health care workers was moderate and they found female health care workers more knowledgeable about HBV infection than males (just like the present survey). In a study by (Mortel et al. 2003). the knowledge of health care workers. regarding HCV was poor. (Ghahramani et al .,2006), also in a study in Shiraz reported that the knowledge of students of medical sciences with respect to the type of hepatitis (A, B, C, D and E) was very weak in a report by (Razi et al 2010).

Concerning the various aspects of HCV infection, this study indicated that more than half of the participants (58%) had moderate knowledge score regarding general knowledge of HCV infection, the majority of participants were aware that hepatitis C is caused by a virus, more than two thirds of them considered HCV infection as a serious disease and the most of nurse interns aware that HCV infection can cause serious complications as liver cirrhosis and cancer. In this context, (Sood et al 2002) (14) showed in their study, that more than half of the participants answered correctly to the questions about hepatitis C complications. In other study conducted by (Nicklin et al, 1999), who reported that half of the personnel indicated cirrhosis was caused by hepatitis C and 37% thought it caused liver cancer.

The present study showed that the nursing student (50%) had good knowledge score regarding common modes of transmission. More than two thirds and two thirds of the nurse interns had correct knowledge about blood and blood products as well as needles and sharp objects as modes of transmission respectively. This is consistent with another study in Kuwait by (Alkandari et al, 2008) who reported that most of the participants were aware that blood and blood products as well as needles and sharps were the main routs of transmission. In the studies of (D'Souza et al., 2004) and van de(Mortel et al., 2003) most of the participants indicated that blood transfusion is a major mode of

transmission. However, some deficits were seen in HCW knowledge on sexual contact as a mode of transmission for hepatitis C this is contrast to the study conducted by (Abd El-Nasser& Abed El baset 2010) who found that the abysmal score 33.3% of student knowledge about of the mode of transmission in the pre-test compared to post-test; the percentage is increased to 86 %.

The present study referred that (40.5%) of the nursing student had good knowledge level regarding ways of preventing HCV infection. More than two thirds of the participants answered correctly about the main items preventing ways related to proper disposal of sharps, needles and blood , avoid needle/sharps injury and avoiding casual sex or/and multiple sexual partners. This finding is similar to a study done by (Wang, 2007) who showed that HCWs are at an increased risk of blood born diseases. The most common form of accidental exposures is due to needle stick injury. Exposures could also result from sharp objects such as scalpels and broken glasses, as well as from mucosal exposures after blood splash or bodily. In accordance to (Askarian, et al., 2009), who stated that proper hand washing and use of barriers such as gloves, gowns, and masks—the main components of standard precautions—can minimize mucocutaneous exposures. Reducing the manipulation of manual sharps can also prevent occupational injuries. The use of puncture-resistant containers for sharp disposal is also an effective strategy.

The most challenging obstacles to managing HCV are the continuous transmission of infection due to lack of effective infection control measures and prevention programs as well as the high cost of treatment .Concerning nurse interns' knowledge regarding measures taken to protect against hepatitis C infection, the present study showed that (56.5%) more than half of them had moderate knowledge level . Most of the nursing interns stated the importance of adequate disposal of sharps as a protection against infection. In a study by (Yaghi, et al., 2010) ,who found that more than 90% of participants were aware that blood and needles and sharps are routes of infection and that avoiding these sharps is a protecting measure, only 80% of them believed in wearing gloves proper disposal of sharps. The results also referred that more than two thirds and about two thirds respectively of the nursing interns reported that wearing of gloves and goggles protect against infection. (Mohamed SA.,et al.,2011) who found that 50% of the nursing interns and 56.4% of medical students did not use the double glove technique because of decreased hand sensation and lack of belief in its benefits.

The present study indicated that nursing student ' overall attitude score is relatively positive (the overall percentage score was 50.5%).this result is in contrast to the study conducted by (Hassan et al., 2011) , who reported that more than half of the sample had negative attitude towards hepatitis C. The present study's results presented that about half of nursing interns agree that all patients should be tested for HCV before they receive health care. This finding was in concordance with the results of van de (Mortel 2003), who reported that it was interesting that staff did not have a blanket response to compulsory testing. Whilst just under three-quarters of staff agreed that patients should disclose their infective status, only half felt that testing prior to surgery should be compulsory, and just over one-third agreed with mandatory testing on admission. Respondents may have felt there was a lower inherent risk of contracting HCV from non-surgical patients.

A round more than one third of nursing student also agree that the following infection control guidelines will protect them from being infected with hepatitis C at work, more than one third of interns agreed to using additional infection control precautions when treating patients with hepatitis C.(Yaghi, et al., 2010) who stated that health care providers who have occupational exposure to blood are at increased risk for acquiring blood-borne infections. The level of risk depends on the number of patients with that infection in the health care facility and the precautions the HCWs observe while dealing these patients. Because the use of preventive measures such as double gloves, masks, and eye protection are mainly associated with particular specialties, the use of these measures could not be generalized to all PHC physicians and specialists.

In the present study, more than one third of the nursing interns (39.5%) also preferred to wear two pairs of gloves when treating a bleeding person with HCV. This was in agreement with (Mohamed SA.,et al.,2011) who found that the great majority of interns and medical students did appear to wear gloves for wound suturing (95.9%) and/or inspection (89.2%), where the risk of contamination with body fluids is high. In our study, more than one third of the participants (39.5%) believed that the infection control guidelines necessary to treat patients with hepatitis C would be a financial burden on their practice/ward. In the study conducted by (Mansour-Ghanaei etal, 2009), who found that the majority of medical students (77.6%) believed that they prefer to wear two pairs of gloves when treating a bleeding person with HBV and HCV This in the line with the study by(Esmat G. 2010) who reported that HCV remains a considerable challenge in the Middle East region imposing both a health and a financial burden and more efforts are required to highlight the problem and augment both prevention and treatment programs

In the present study, More than half of nursing student (56.5%) don't like treating people with hepatitis C While about one third of them appeared their willing to treat people with hepatitis C. In the study by(Joukar et al.,2011) who found that most of the participants indicated willingness to treat patients with hepatitis C. Finally, in the present study, there was a significant correlation among nursing student ' attitude and their total level of knowledge toward patients with hepatitis C in a way that higher knowledge is associated with better attitude. This finding was in concordance with the results of (Joukar et al, 2011), who found that there was a significant correlation between HCW knowledge levels and attitudes. A similar positive correlation for awareness level and attitude was found in a study done on HCW in India. (SetiaS. et al., 2010) .

Also , the majority of nursing student responses to the attitudes and practices statements (66% , 63%, , 61%, , 59%,57% 54%,) Not agree about When looking after a patient with hepatitis C, try to spend as tittle time with them as possible. I can't always follow standard precautions because my patient's needs come first. If I know someone has hepatitis C,I treat them differently to other patients. I try to avoid looking after patients infected with hepatitis . I prefer an exciting , unpredictable life, not agree enjoy taking risks in life and (62% & 50%) agree about have no problem looking after someone with hepatitis C regardless of how they caught the disease and use standard precautions to protect myself whenever I suspect I might be exposed to body fluids. This is Similarly, the percentage of staff who agreed with mandatory testing on admission was lower than that reported for studies which examined HCWs' views on mandatory testing for HIV (35% vs. 66%) (Hossini et al .,2000) . It may be that HCV is rightly considered a less dangerous virus than HIV by HCWs and so they are less concerned about it (Bennett 2008). It was interesting that staff did not have a blanket response to compulsory testing. Whilst just under three-quarters of staff agreed that patients should disclose their infective status, only half felt that testing prior to surgery should be compulsory, and just over one-third agreed with mandatory testing on admission. Respondents may have felt there was a lower inherent risk of contracting HCV from non-surgical patients.

The majority of staff appeared to be willing to care for persons infected with HCV. While early studies on the attitudes and practices of staff towards persons with HIV showed a high level of discriminatory attitudes and practices, some more recent studies have shown that attitudes may now be less negative, perhaps reflecting more favorable media attention and greater contact with HIV-positive persons, The same may be true for HCV, although it again may also be that staff perceive HCV as less threatening than HIV (Lohrmann et al., 2000& Snowden1997).

Finally, in the present study, there was a significant correlation among nursing student attitude and their total level of knowledge toward patients with hepatitis C in a way that higher knowledge is associated with better attitude. This finding was in concordance with the results of (Joukar et al, 2011), who found that there was a significant correlation between HCW knowledge levels and attitudes. A similar positive correlation for awareness level and attitude was found in a study done on HCW in India. Also this finding not correlated with the result of(Farrell et al., 2002) , Surprisingly, knowledge levels were not correlated significantly with willingness to care for patients with HCV, despite such correlations in other studies examining HCWs' attitudes to HIV (Tierney 1995). This may be due to the fact that knowledge scores overall were fairly low, which did not allow sufficient variation to fully test this hypothesis. Data obtained from a larger sample

in a wider range of workplaces may provide a more comprehensive picture.

Conclusion

There was a significant correlation among nursing student ' attitude, practice and their total levels of knowledge toward patients with hepatitis C.

Recommendation

- It is recommended that continuing education programs are needed to increase awareness of hepatitis C virus in various risk groups in our country. Also replication of the study on a larger probability sample from different geographical areas should be done to achieve more generalize.
- Increase the level of education about the disease, its prevention , management and infection control between undergraduate students and increase their interaction with hepatitis patients.
- Develop educational programs about hepatitis C because it is necessary to increase the level and quality of training among nursing student to prevent or decrease negative attitude towards patients with hepatitis C.

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