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KNOWLEDGE OF NURSING ACADEMICS ABOUT HEPATITIS C

CONHECIMENTO DOS ACADÊMICOS DE ENFERMAGEM ACERCA DA HEPATITE C

CONOCIMIENTO DE LOS ACADÉMICOS DE ENFERMERÍA ACERCA DE LA HEPATITIS C

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ABSTRACT

Objective: to evaluate the knowledge of nursing students about hepatitis C. **Method:** a cross-sectional study developed at a public university in the Brazilian Northeast. 129 students enrolled in the 5th to 9th semester participated in the study. Data were obtained by self-administered questionnaire between September and November 2015. The instrument applied to students consisted of two parts: 1) seven questions related to personal data to compose the characterization of the subjects; 2) Nine hepatitis C specific multiple choice questions asking about prevention, transmission, post-exposure measures, signs and symptoms, complications and treatment. **Results:** the majority of the participants had a moderate level of knowledge (69.7%), followed by a low level (21.7%). The association of high level of knowledge with advanced semester of the course was verified (p 0.05), which was not observed in the other variables as another formation or participation in projects related to the theme. **Conclusion:** the knowledge about hepatitis C is reduced among nursing students, so teaching strategies are suggested that allow greater approximation with such a relevant topic in nurses' education.
Descriptors: Hepatitis C; Hepatitis Viral Human; Students Nursing; Nursing.

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RESUMO

Objetivo: avaliar o conhecimento de acadêmicos de enfermagem acerca da hepatite C. **Método:** estudo transversal desenvolvido em uma universidade pública do nordeste brasileiro. Participaram da pesquisa 129 graduandos matriculados entre o 5º e 9º períodos. A obtenção dos dados ocorreu por questionário auto-aplicado entre setembro e novembro de 2015. O instrumento aplicado aos estudantes foi constituído em duas partes: 1) sete perguntas relacionadas a dados pessoais para compor a caracterização dos sujeitos; 2) nove questões de múltipla escolha, específicas sobre hepatite C indagando sobre prevenção, transmissão, medidas pós-exposição, sinais e sintomas, complicações e tratamento. **Resultados**: a maioria dos participantes apresentou nível de conhecimento moderado (69,7%), seguido de baixo nível (21,7%). Verificou-se a associação de alto nível de conhecimento com semestre avançado do curso (p 0,05), o que não foi observado nas demais variáveis como outra formação ou participação em projetos relacionados ao tema. **Conclusão**: o conhecimento acerca da hepatite C é reduzido entre estudantes de enfermagem, portanto sugerem-se estratégias de ensino que viabilizem maior aproximação com temática tão relevante na formação do enfermeiro.

Descritores: Hepatite C; Hepatite Viral Humana; Estudantes de Enfermagem; Conhecimento; Enfermagem.

RESUMEN

Objetivo: evaluar el conocimiento de académicos de enfermería acerca de la hepatitis C. **Método:** estudio transversal desarrollado en una universidad pública del nordeste brasileño. Participaron de la investigación 129 graduandos matriculados entre el 5º y 9º períodos. La obtención de los datos ocurrió por cuestionario auto-aplicado entre septiembre y noviembre de 2015. El instrumento aplicado a los estudiantes constaba de dos partes: 1) siete preguntas relacionadas con datos personales para componer la caracterización de las asignaturas; 2) Nueve preguntas de opción múltiple específicas para la hepatitis C que se refieren a la prevención, transmisión, medidas posteriores a la exposición, signos y síntomas, complicaciones y tratamento. **Resultados:** la mayoría de los participantes presentó nivel de conocimiento moderado (69,7%), seguido de bajo nivel (21,7%). Se verificó la asociación de alto nivel de conocimiento con semestre avanzado del curso (p 0,05), lo que no fue observado en las demás variables como otra formación o participación en proyectos relacionados al tema. **Conclusión:** el conocimiento acerca de la hepatitis C es reducido entre estudiantes de enfermería, por lo que se sugieren estrategias de enseñanza que viabilicen mayor aproximación con temática tan relevante en la formación del enfermero.

Descriptores: Hepatitis C; Hepatitis Viral Humana; Estudiantes de Enfermería; Enfermería.

INTRODUCTION

Hepatitis C is an inflammatory liver disease, whose etiologic agent is the hepatitis C virus (HCV). Currently it is revealed as a serious public health problem in Brazil and in the world for being directly responsible for cases of cirrhosis, competing with alcoholic hepatitis, as the main cause of chronic liver disease.[1-2]

Although there is a worldwide spread and clinical severity, hepatitis C is still known as an epidemic called "silent". According to the epidemiological bulletin of Viral Hepatitis 2015, more than 17,000

cases of hepatitis C were reported in Brazil in the Information System for Notified Diseases in 2014, which is a matter of concern.[3-4]

Estimates show that about 20% of those chronically infected with HCV can progress to liver cirrhosis, and from 1% to 5% to liver cancer. Thus, in the west, HCV is one of the main indications for liver transplantation and a relevant cause of morbidity and mortality worldwide.[5]

It is worth mentioning that hepatitis C involves numerous forms of transmission. Among them, occupational exposure to HCV stands out, since subclinical infection prevails and most patients have no symptoms in the acute phase, leaving health professionals, especially nursing professionals, more vulnerable. It generates greater need for knowledge on the part of these professionals.[6]

Knowledge about the nature, symptoms, transmission, prevention and treatment of hepatitis C are key elements for nursing students, for as members of the health production system, whether in nursing care or production of research knowledge, they can assist people infected by HCV.[7]

As future nurses, a health professional who spends most of the day with patients, the student needs to be prepared during their academic training so that they can perform the appropriate clinical care, in addition to being aware of the correct individual safety equipment to be used.[8]

Thus, it is perceived the need for nursing students to receive training aimed at promotion, prevention and clinical treatment appropriate to HCV, that is, to have sufficient knowledge, which culminates in the need to address the issue with more time and depth throughout the undergraduation course.[9]

In this context, this study aims to assess the knowledge of nursing students about hepatitis C. As it is a topic of relevance to nurses' education, it is expected that this research will enable the implementation of actions with students, contributing to their academic formation, as well as to new scientific research.

METHOD

Cross-sectional, descriptive study with a quantitative approach, developed at a public university in northeastern Brazil. The study population consisted of 211 undergraduate nursing students who were enrolled between the 5th and 9th periods in the second semester of 2015. Among them, 42 students were from the 5th period, 46 students from the 6th period, 39 students from the 7th period, 38 students from the

8th period and 46 students from the 9th period. To determine the sample, it was used the sample calculation formula for finite populations with a sampling error of 5%, which totaled 129 students, which was later stratified by semester as shown in table 1. Students were selected between the 5th and 9th periods due to having taken courses with content on hepatitis C.

Table 1 - Distribution of the sample by periods of nursing students at a public university in northeastern Brazil.

Strata (periods)	Population	% sample of students by period	Sample
5th period	42	20.15%	26
6th period	46	21.71%	28
7th period	39	18.60%	24
8th period	38	17.83%	23
9th period	46	21.71%	28
Total	211	100%	129

As inclusion criteria, those who were 18 years old or older and enrolled regularly from the 5th period of the course were chosen, as they had already completed subjects in the basic cycle and had some contact with the theme.

Data collection took place between September and November 2015, initially identifying which days the students were at the institution. Then, they were approached in the classroom, informed about research and then invited to participate. Upon acceptance, they signed the Informed Consent Form.

The questionnaires were applied by undergraduate nursing students who were part of the Evidence Based Nursing Research Group previously trained. A questionnaire consisting of two parts was used as an instrument: 1) seven questions related to personal data to compose the characterization of the subjects, containing data such as name (initials), gender, age, period that the student is studying, if he/she has another education, if previously participated in a course/project/training related to the theme and the information received so far about this disease is considered satisfactory; 2) nine multiple choice questions, specific about hepatitis C asking about prevention, transmission, post-exposure measures, signs and symptoms, complications and treatment, based on available literature, on clinical protocols of

the Ministry of Health and adapted for this study, and at the end a discursive question in order to evaluate the degree of difficulty of the questionnaire. The latter item was based on two studies.[10-11]

The students' level of knowledge about hepatitis C was assessed according to the number of correct answers to the questions, referring to the second part of the questionnaire, being classified into the following levels: Low (0-3 correct answers), moderate (4-6 correct answers) and high (7-9 correct answers). These levels of correct answers were followed according to a published study.[12]

To structure the information and tabulate the data, Microsoft Excel 2010 was initially used and analyses were performed using the Statistical Package for the Social Sciences software version 20.0. To check the association of variables, the chi-square test was used, with a significance level of 5%. This study was submitted to and approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte, Brazil, under protocol No. 1,131,724 and CAAE: 46207115.5.0000.5537. All participants signed two copies of the Free and Informed Consent Form.

RESULTS

As for the characterization of the 129 participating academics, most were female (86.0%). With respect to the age group, up to 23 years (69.77%). As for the degree of period studied, 5th period (20.15%), 6th period (21.71%), 7th period (18.60%), 8th period (17.83%) and 9th period (21.71%). 86.05% have no other training, 93.80% have no participation in projects and activities related to viral hepatitis. Lastly, 41.86% are not satisfied with the information received about the disease (Table 2).

Table 2 - Characteristics of nursing students at a public university in northeastern Brazil.

Students' characteristics		**N**	**%**
Gender	Female	111	86,05
	Male	18	13,95
Age group	Up to 23 years	90	69,77
	Over 23 years	39	30,23
Period	5th period	26	20,15
	6th period	28	21,71
	7th period	24	18,60
	8th period	23	17,83
	9th period	28	21,71
With previous formation	No	111	86,05
	Yes	18	13,95
Participation in projects related to hepatitis	No	121	93,80
	Yes	8	6,20
Satisfaction with the information received on the disease	Yes	32	24,81
	More or less	43	33,33
	No	54	41,86
Total		**129**	**100,00**

The results show that the students of the 5th period obtained 100.0% of correct answers, referring to question 08, which portrayed the prevention and transmission of the HCV virus. The 8th period also showed a performance of 100.0% of correct answers in question 03 related to the main complications that occur in the most severe cases of chronic hepatitis C. Both questions belong to the second part of the questionnaire.

Regarding the degree of difficulty of the questionnaire, 59.6% of the participants considered the questionnaire to be of moderate difficulty, followed by difficult (29.4%) and only 10.8% judged it as easy.

As for the number of questions considered correct regarding hepatitis C, the majority (69.7%) obtained a result between 4 and 6 correct answers, being considered in this study as a moderate level (Table 3).

Table 3 - Distribution of the level of knowledge about hepatitis C of nursing students at a public university in northeastern Brazil.

Knowledge level	**N**	**%**
Low	28	21.71
Moderate	90	69.77
High	11	8.52
Total	**129**	**100.00**

According to Table 4, the participants in the 8th period obtained a higher percentage in the classification of high level of correct answers with 26.0%, followed by the 5th period (7.6%). When relating the classification of correct answers of questions about hepatitis C to the characterization of students, it was observed that 50.0% of students who participated in projects related to hepatitis C obtained a moderate level of knowledge. It was also noted that 26.3% of students who found the questionnaire difficult, had a low level of knowledge (Table 4).

Table 4 - Classification of correct answers to questions about hepatitis C versus the students' profile.

	Knowledge level			**N**	**p-value**
Period	**Low**	**Moderate**	**High**		
5th	11.54% (n = 3)	80.77% (n = 21)	7.69% (n = 2)	**N = 26**	
6th	28.57% (n = 8)	71.43% (n = 20)	0.00% (n = 0)	**N = 28**	
7th	29.17% (n = 7)	66.67% (n = 16)	4.16% (n = 1)	**N = 24**	**0.050 (1)**
8th	13.04% (n = 3)	60.87% (n = 14)	26.09% (n = 6)	**N = 23**	
9th	25.00% (n = 7)	67.86% (n = 19)	7.14% (n = 2)	**N = 28**	
With another formation					
No	20.72% (n = 23)	71.17% (n = 79)	8.11% (n = 9)	**N = 111**	**0.689 (1)**
Yes	27.78% (n = 5)	61.11% (n = 11)	11.11% (n = 2)	**N = 18**	
Participation in projects related to hepatitis C					
No	21.49% (n = 26)	71.07% (n = 86)	7.44% (n = 9)	**N = 121**	**0.198 (1)**
Yes	25.00% (n = 2)	50.00% (n = 4)	25.00% (n = 2)	**N = 8**	
Satisfaction with information received about hepatitis C					
Yes	12.50% (n = 4)	75.00% (n = 24)	12.50% (n = 4)	**N = 32**	
More or less	18.60% (n = 8)	74.42% (n = 32)	6.98% (n = 3)	**N = 43**	**0.353 (1)**
No	29.63% (n = 16)	62.96% (n = 34)	7.41% (n = 4)	**N = 54**	
Degree of difficulty of the questionnaire					
Easy	14.29% (n = 2)	78.57% (n = 11)	7.14% (n = 1)	**N = 14**	
Moderate	20.78% (n = 16)	72.73% (n = 56)	6.49% (n = 5)	**N = 77**	**0.586 (1)**
Difficult	26.32% (n = 10)	60.53% (n = 23)	13.15% (n = 5)	**N = 38**	

(1) Chi-square

DISCUSSION

Considering the high incidence, morbidity and mortality of hepatitis C in the world, as well as being one of the main causes of chronic liver disease, it is imminent that nursing students, as future health professionals, have knowledge about the subject.[13]

In this context, the results of the present study demonstrated that in most periods, nursing students had a moderate level of correct answers. This finding is compatible with another study that indicates low learning about Hepatitis C during the nursing student training process. It also demonstrates the deficit in teaching and learning and how much it can have repercussions in the performance of the future nurses in face of their professional practice.[14]

However, highlighted, the results presented by the 5th and 8th periods of the undergraduate nursing course stood out with a high level of knowledge in relation to the 6th, 7th and 9th periods.

The high level of knowledge demonstrated in the 5th period may be related to the classes taught on viral hepatitis, among them hepatitis C, in which the curricular matrix of that period offers. Meanwhile, the 8th period may be pertinent to students having to resume content previously seen on hepatitis C, due to the requirements of the subject when they go to their fields of practice in primary care.

In relation to the other periods, they obtained an average of a moderate level of knowledge, which may be related to forgetting what had previously been covered during the course or due to the lack of ability to understand the disease.

A study carried out in Turkey emphasizes that even if students are exposed to the theme of assistance to patients with hepatitis C, it is common that over time they do not remember. Such fact may be associated with the little contact of students with users who have the infection, since there are no mandatory practical activities or course conclusion stages developed during the graduation, in hospitals of infectious diseases, about the disease, to guarantee its qualified professional practice.[15]

It is worth mentioning that all the academics of the 5th period answered a question that portrayed the prevention and transmission of the HCV virus. This data corroborates with a recent study carried out with nursing students, attending the 5th period of a Brazilian university, which were able to answer the questions about

transmission regarding the questionnaire applied about hepatitis C. With this, it was shown that students have a good understanding of its transmissibility.[16]

Notwithstanding, the 8th period also stood out in relation to the question of what addressed the main complications that occur in the most severe cases of chronic hepatitis C, the liver cirrhosis, all of them getting the question right. These academics are better able as future nurses to offer better assistance to patients with minimal or moderate fibrosis, in order to reduce the possibility of reaching liver cirrhosis, as they have a higher level of knowledge about the disease.[17]

With regard to the participation of projects related to hepatitis C, it was revealed that students who participated in research/extension projects on the disease had a high level of knowledge compared to those who did not participate with a low level of knowledge.

Similar to this assessment is the study carried out with students from health courses at the Federal University of Sergipe, showing that students who participate in research projects/extension, provide greater scientific attitudes, confirming the importance of these extracurricular activities in academic training. It also improves scientific knowledge in nursing graduation, so that their attitudes will positively impact the clinical practice of these future nurses.[17] Therefore, it explains why the students who participated in projects on hepatitis C showed higher performance in the questionnaire, when related to their level of knowledge.

It can also be seen in this research that the degree of difficulty of the questionnaire was a point to be taken into account. It states that the little knowledge of students on a given subject can be directly related to the greater difficulty of having a good understanding on this topic in the undergraduate course, evidenced by the low number of correct answers. This becomes explicit in this study, so that academics who exhibited a moderate to low level of knowledge were concomitantly those who found the questionnaire difficult.[19]

However, the results of the present study reinforce the importance of working with nursing students' knowledge, because some periods exhibited a high level of knowledge. However, the majority had a moderate to low level. Working on students' knowledge is fundamental, so that they can understand the importance of knowledge about hepatitis C, and make knowledge equal and qualified. As, in addition to being future nurses prepared to

assist patients with hepatitis C, they are agents that multiply information to the population.[19]

In view of all these findings, it should be noted that although the results were not statistically significant, their analysis was important to be discussed, in order to contribute directly to the training of future health professionals.

CONCLUSION

The present study showed that most academics have a moderate to low level of knowledge. Even with some students stand out with high levels of knowledge. It is recommended that nursing students expand their studies on hepatitis C, in order to participate in training courses, intensify information on the topic and improve the content offered during graduation. It is important, since as future nurses they are able to meet the needs required in nursing care for patients with hepatitis C.

It is believed it is a subject with great potential in nursing; therefore, further studies are suggested that reinforce the importance of expanding the knowledge of nursing students on hepatitis C during academic training, in which future work should be encouraged.

Regarding the limitations of the study, it can be mentioned that it was carried out in only one higher education institution (IES). Thus, the results only portray the reality of a specific IES.

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