ORIGINAL RESEARCH

To determine the KAP of Medical Students towards Hepatitis B and Hepatitis C

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ABSTRACT
Aim: To determine the KAP of Medical Students towards Hepatitis B and Hepatitis C. **Material and Methods:** The medical students participated in a research that consisted of filling out questionnaires. The questions sought information on the respondent's knowledge and attitude towards diseases caused by hepatitis B and C. One hundred and fifty students enrolled in the MBBS programme took part in the research. Knowledge, attitudes, and practises with regard to hepatitis B and hepatitis C were evaluated with the use of a pretested proforma that included a questionnaire. **Results:** Respondents' awareness of hepatitis B risk factors included the following: 98% knew about infected blood transfusions, 97% knew about sharing needles, 88% knew about infected mother to child transmission, 91% knew about unsafe sexual contact, and 94% knew about body piercing and/or tooing. Responders were aware of the risk factors for Hepatitis C, including the transmission of the virus via blood transfusions. 88%, 81% knew about sharing needles; 6% knew about transmitting infection from mother to kid; 63% knew about risky sexual contact; and 64% knew less about tattooing and piercing, which was demonstrated to be the case. 79% of students were aware that nausea and vomiting are symptoms of hepatitis C, and 75% were aware that a yellowish tint is one of those symptoms. 78% of students were aware of anorexia as a sign and symptom of hepatitis C, whereas 63% were aware of stomach discomfort, and 58% were aware of joint pain. **Conclusion:** The medical students have a strong understanding of both Hepatitis B and C, as well as a positive attitude towards the topic. It is very necessary, in order to prevent the further spread of Hepatitis B and Hepatitis C, to educate medical students about the many facets of the illness and the need of vaccination as part of an active health education programme.
Keywords: Hepatitis B, Hepatitis C, Knowledge,

INTRODUCTION

The spread of infections caused by the hepatitis B virus (HBV) and the hepatitis C virus (HCV) is an issue that affects the whole globe. According to the World Health Organization (WHO), there are about 1.9 billion persons infected with HBV around the world. In addition, out of those 2 billion people, 350 million suffered from a chronic infection that lasted their whole lives [1]. In addition, it is predicted that between 15 and 40 percent of chronic HBV carriers are at risk of developing liver cirrhosis and hepatocellular cancer [2,3]. In addition, between 10 and 15 million people in the Asia Pacific area are afflicted with hepatitis B, which is a disease that is widespread across the region [4-6]. Around 3.3 percent of the world's population, or about 200 million individuals, are infected with Hepatitis C Virus [7,8]. Infection with the Hepatitis C virus seems to be endemic in the majority of the world's regions [7,8]. Students at medical schools are especially at risk because they are more likely to get infected with Hepatitis B and C as a result of the incidence of needle stick injuries and their increased exposure to patients who are ill with hepatitis. In addition, there was neither a mandatory vaccination programme in place, nor was there a post-vaccination test programme to establish individuals' levels of immunity. The prevention of the spread of these illnesses requires having a sufficient amount of information as well as the appropriate attitude towards them. Because medical students are in close contact with those who have hepatitis both while they are studying medicine and after they have graduated, members of the health care staff and medical students have the most significant role to play in the prevention of the disease. This can be accomplished by increasing both groups' levels of disease knowledge. As future medical professionals, medical students face

the risk of acquiring percutaneous injuries and, as a result, the risk of contracting blood-borne infections such as Hepatitis Band C viruses[11,12]. As a result, medical students' general knowledge and attitude regarding viral hepatitis and its transmission and prevention can stop the spread of this disease in hospitals and society[13]. As a result, the purpose of this research was to assess the knowledge, attitudes, and behaviours about hepatitis B that are held by medical students. And to assess the knowledge, attitudes, and behaviours about Hepatitis C that are held by future medical professionals.

MATERIAL AND METHODS

The Department of Community Medicine oversaw the gathering of data for this prospective and cross-sectional research. The institution's ethical and scientific committees gave their support to the study before it was conducted. Prior to the beginning of the research project, a signed informed consent form was obtained from each and every person who was going to take part. The medical students participated in a research that consisted of filling out questionnaires. The questions sought information on the respondent's knowledge and attitude towards diseases caused by hepatitis B and C. One hundred and fifty students enrolled in the MBBS programme took part in the research. Knowledge, attitudes, and practises with regard to hepatitis B and hepatitis C were evaluated with the use of a pretested proforma that included a questionnaire. The statistical programme SPSS was used throughout the data collection and analysis processes. A tabulation of the data was carried out, and frequencies and percentages were discovered as a result.

RESULTS

This questionnaire research included a total of one hundred MBBS students as participants. The ages of the participants in the research are broken down by gender in Table 1. The gender distribution of the overall student body of 100 was as follows: 47 boys (47%) and 53 girls (53%). The majority of research participants, around fifty percent, were between the ages of twenty and twenty-two.

Table 1 Gender and age distribution of the participants

Gender	Number	Percentage
Male	47	47
Female	53	53
Age		
18-20	46	46
20-22	50	50
22-24	4	4

When asked whether they were familiar with hepatitis B, all of the pupils in the class had some prior knowledge of the virus. When tested on their knowledge of the incubation period, thirty-six (36%) students did not know the incubation period of hepatitis B. Only twenty-five percent of the students were aware of the correct incubation period, while forty-two percent of the students stated the incorrect incubation period. However, all of the students were aware that a virus is the cause of hepatitis B.

Table 2: Knowledge of Hepatitis B risk factors

Risk group	Number	%
Infected Blood receivers	97	97
Persons with multiple sexual partners	94	94
Health workers	82	82
Babies born with infected mothers	91	91
Uneducated people	64	64
People living in unhygienic conditions	70	70
Surgeons	93	93
Barbers	65	65

The information on the potential dangers of Hepatitis B is included in Table 2. Respondents' awareness of hepatitis B risk factors included the following: 98% knew about infected blood transfusions, 97% knew about sharing needles, 88% knew about infected mother to child transmission, 91% knew about unsafe sexual contact, and 94% knew about body piercing and/or tooing.

Table 3: Knowledge of Signs and Symptoms of HBV Infection.

	Number	%
Anorexia	77	77
Nausea &Vomitting	82	82
Yellowish	82	82
Abdominal Pain	71	71

Joint Pain	70	70

The pupils' levels of awareness on the warning signs and symptoms of hepatitis B are shown in Table 3. 82% of the students were aware that the signs and symptoms of hepatitis B include nausea and vomiting, as well as a yellowish staining of the eyes. Students had a knowledge base of the signs and symptoms of hepatitis B that included anorexia at 77%, stomach discomfort at 71%, and joint pain at 70%.

Table 4: Knowledge of risk groups of Hepatitis B

Risk factor	Number	%
Unsafe sexual contacts	94	94
Infected Blood transfusion	98	98
Sharing common needles to inject drugs	97	97
Infected mother to child	88	88
Tattooing/piercing	85	85

Infected blood receivers, people who have several sexual partners, people who work in health care, infants born to infected moms, surgeons, and barbers were the risk categories that were evaluated. The information that is known regarding the risk categories for hepatitis B is shown in table no. 4. The knowledge that hepatitis B may be spread by a needle stick injury was present among 87 (87%) of the pupils. Never in the history of the class did anybody become injured by a needle poke. Just 35 pupils, or 35%, had any knowledge of the universal safety principles. The availability of the hepatitis B vaccination was known to 93 (93%) of the pupils. 26 students, or 26% of the total, had previously been tested for Hepatitis B, and the same number of students were aware that vaccination is an option for preventing the illness. Hepatitis B vaccinations were given to 61 (61%) of the pupils. Thirty (30%) out of one hundred knew the appropriate vaccination regimen for hepatitis B.

Table 5: Knowledge of Hepatitis C risk factors

Risk factor	Number	%
Unsafe sexual contacts	63	63
Infected Blood transfusion	88	88
Sharing common needles to inject drugs	81	81
Infected mother to child	76	76
Tattooing/piercing	64	64

The information presented in Table 5 demonstrates the level of awareness of the Hepatitis C risk factors. Responders were aware of the risk factors for Hepatitis C, including the transmission of the virus via blood transfusions. 88%, 81% knew about sharing needles; 6% knew about transmitting infection from mother to kid; 63% knew about risky sexual contact; and 64% knew less about tattooing and piercing, which was demonstrated to be the case. 79% of students were aware that nausea and vomiting are symptoms of hepatitis C, and 75% were aware that a yellowish tint is one of those symptoms. 78% of students were aware of anorexia as a sign and symptom of hepatitis C, whereas 63% were aware of stomach discomfort, and 58% were aware of joint pain.

Table 6: Knowledge of risk groups of Hepatitis C

Risk group	Number	%
Infected Blood receivers	90	90
Persons with multiple sexual partners	65	65
Health workers	74	74
Babies born with infected mothers	74	74
Uneducated people	67	67
People living in unhygienic conditions	70	70
Surgeons	74	74
Barbers	65	65
Haemodyalysis patients	74	74

Infected blood receivers, individuals with several sexual partners, health professionals, infants born to infected mothers, people with low levels of education, people living in unclean settings, surgeons, barbers, and haemodialysis patients were the categories that were examined. Table 5 presents information about the various risk categories associated with hepatitis C. Just 27 students (27%) were aware that there is now no vaccination available for hepatitis C. Seventy-four percent of the pupils had no idea what the Hepatitis C vaccination was.

DISCUSSION

The purpose of this research is to investigate the knowledge, attitudes, and practises of medical students with regard to hepatitis B and hepatitis C infections. The research comprised a total of one hundred different medical students. There were a total of 100 pupils, with 77 (47%) being male students and 53 (53%) being female students. The majority of

research participants, around fifty percent, were between the ages of twenty and twenty-two. According to the findings of our research, each and every student had prior knowledge of hepatitis B and was aware of the infectious agent that causes hepatitis B. According to the findings published by Abdnur Abdela et al. [14], approximately 77% of the medical students were aware that they are at risk for HBV infection, and 83.3% of them agreed that adhering to the guidelines for infection control would protect them from becoming infected while they were working.

Respondents in our research had a high level of awareness on the following Hepatitis B risk factors: infected blood transfusion 98%, needle sharing 97%, infected mother to child 88%, unsafe sexual contact 91%, and at tooing/piercing 94%. The findings are consistent with those of a study that was conducted in Lahore[15]. That study found that a high level of knowledge existed regarding the transmission of hepatitis B and C through blood and blood products (80.7%), the sexual route (53.6%), and through the use of used needles and syringes (80%). However among medical students, the risk of contracting Faeco via the oral route (27.5%) and polluted water (43.2%) was minimal. A research published in B.J. Medical found results that were comparable [16]. In that particular investigation, a significant number of the participants either had an inaccurate understanding of the topic or were unaware that tattooing, dental treatments, and sexual interaction might all serve as possible vectors for the transmission of HCV and HBV. Knowledge of the risk factors associated with hepatitis B varies from 31.6% to 93.7% among dental students, whereas awareness of the risk factors associated with hepatitis C ranges from 40.5% to 86.1% among dental students. 73.4 percent of respondents had had the Hepatitis B vaccine, and 87.1 percent demonstrated an accurate understanding of the dosages required for the immunisation. Nevertheless, only 1.3% of people had adequate information about the post-exposure prophylaxis for hepatitis C [17]. Throughout the course of our research, 61 (61%) of the pupils received the Hepatitis B vaccination. Thirty (30%) out of one hundred were aware of the appropriate vaccination regimen for hepatitis B. According to the findings from our study, a positive correlation exists between the knowledge that medical students have about Hepatitis B and C and their attitude towards the diseases. More specifically, our findings suggest that a higher level of knowledge is associated with a more favourable attitude. This finding is in line with the findings of other polls that were conducted in a similar manner. According to the findings of an epidemiological study [18] conducted on medical students' awareness of and compliance with the hepatitis B vaccine in a tertiary care academic hospital, almost half of the participants in the study had medium to low knowledge levels of HBV, and almost half of the participants were not compliant with the vaccination programme.

Increasing people's general knowledge of this illness and the need of preventing it should be a primary focus of any awareness initiatives and campaigns that are devised. In a study conducted in Iraq by Othman S M et al[19], the researchers found that students' awareness regarding the HBV vaccine was insufficient. Just 64 percent of the students were aware that immunisation against HBV infection is one strategy to avoid the sickness. Just 45 percent of the pupils had been vaccinated against HBV at the time of the survey. More than three quarters of the participants in a study conducted by medical students at Tanta University had a favourable attitude towards hepatitis B and C viral hepatitis, according to the findings of the study. Very few of the people who participated in the survey held unfavourable views or were unsure of their stances when it came to accepting screening for viral hepatitis B and C, getting additional investigations and treatment if it was discovered that they had hepatitis B, or accepting marriage with someone who has hepatitis B or C. The vast majority of the students who participated in the research (82%) said that they would neither agree to share or really engage in the practise of sharing needles, toothbrushes or barber blades with other people [20]. The similarities between our results and those of this research are significant. Regarding hepatitis B and hepatitis C viral infections, the students exhibited strong knowledge, a positive attitude, and excellent practises. Several of the routes of transmission, consequences, and treatments for viral hepatitis B and C were examples of knowledge gaps that needed to be filled up.

CONCLUSION

The medical students have a strong understanding of both Hepatitis B and C, as well as a positive attitude towards the topic. It is very necessary, in order to prevent the further spread of Hepatitis B and Hepatitis C, to educate medical students about the many facets of the illness and the need of vaccination as part of an active health education programme.

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