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### RESEARCH ARTICLE

## KNOWLEDGE, ATTITUDE AND PRACTICE OF DENTAL STUDENTS REGARDING HEPATITIS INFECTIONS.

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#### Manuscript Info

##### Manuscript History

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#### Abstract

Hepatitis is an infection widely haunting the health care workers especially dentist. It is essential for the dental health care providers to have good knowledge about the hepatitis infection and also put them into practice. Current study reveals the shortcomings in the practice and attitude among the dental student. There by throwing light on the field that needs improvement to prevent the spread of infection from one patient to another, from patient to the dentist and vice versa.

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#### Introduction:-

Hepatitis is a viral infection that affects the liver and can cause both acute and chronic diseases. According to WHO, two billion people (one-third of the world population) have evidence of hepatitis B virus (HBV) infection in blood and 360 million are chronic carriers and at risk of liver disease(1,2).

Vaccination is the most effective measure to reduce the incidence of hepatitis B. In 1991, the WHO recommended the integration of universal hepatitis B vaccination by 1997 to prevent and control on a global scale HBV infection and its long-term, manifestation(3). There are also complications following Hepatitis B vaccination. There can be sudden infant death syndrome, multiple sclerosis, chronic fatigue syndrome, idiopathic thrombocytopenic purpura, vasculitis optic neuritis, anaphylaxis, systemic lupus erythematosus, lichen planus and neuro-muscular disorder(4). It has been estimated that 14.4% and 1.4% of hospital workers are infected with HBV and HCV, respectively(5). However good knowledge about the dental consideration and precautionary measures to protect skin and mucous membrane of the health care professionals is important.

The virus is transmitted via the blood and body fluids of infected person, so it is an important occupational hazard among the dentist Hence the knowledge about the infection, the attitude towards the infection and the practice followed to prevent it s an important concern.

#### Materials and methods:-

A questionnaire was formulated, with 15 questions to assess each of knowledge, attitude and practice among dental students. A convenient sampling method was used. 150 questionnaires were distributed among the 50 students each from Group A (final year UG students), Group B( Residents) and Group C(PG students). Out of which 122 questionnaires were returned with complete answers. It was then evaluated in each of those aspects of knowledge, attitude and practice among the 3 groups.

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**Statistical Analysis:-**

ANOVA was done to assess the difference between the three groups regarding their knowledge attitude and practice towards hepatitis infection.

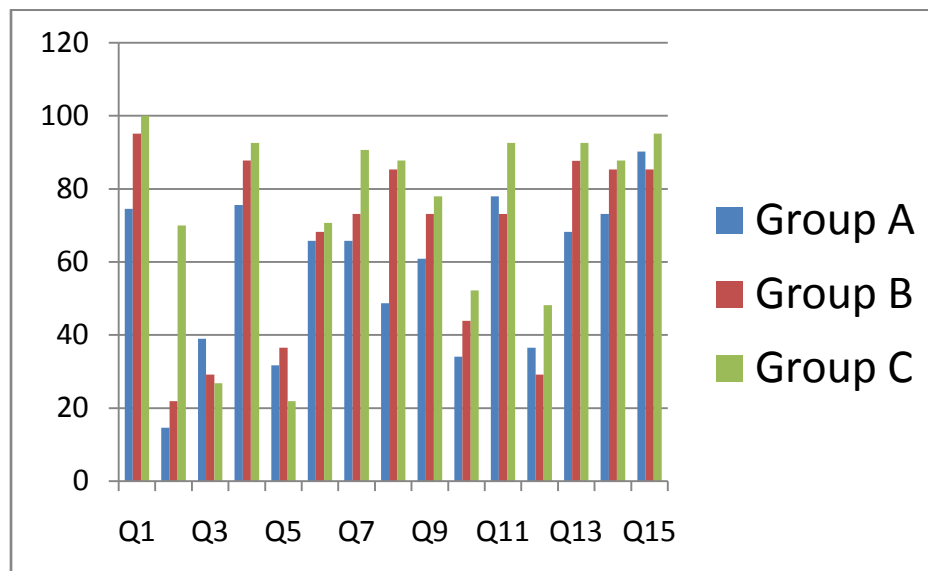
**Table I:-** Knowledge Attitude And Practice Questionnaire For Hepatitis Infection Used In The Study.

1	Hepatitis B is a .....infection?	9	Is there active immunization available for Hepatitis B?
2	Where is the highest concentration of hepatitis B ?	10	When should the booster doses be provided for Hepatitis B?
3	What is the oral manifestation of the disease?	11	Do you sterilize your instruments according to the sterilization protocol in between patients?
4	Are there any vaccination available for hepatitis B infection?	12	Have you ever been pricked accidentally by a needle used for a patient?
5	What is the incubation period for hepatitis B infection?	13	Do you take proper history of patients before starting the treatment?
6	Can hepatitis B infection be self cured by the body?	14	Do you wear a double glove and double ask in case you happen to treat a hepatitis B infected patient?
7	Have you completed the course of vaccination for hepatitis B infection?	15	The first thing you do if you happen to accidentally prick by a needle used for a patient, you carefully wash the wound without rubbing it hard for several minutes with soap. Using a disinfectant of established efficacy, or apply pressure below the wound induce bleeding?
8	What is the vaccination protocol for hepatitis B?		

**Results:-**

Though Group C were found to have better knowledge, attitude and practice than the Group A and Group B, there was no significant statistical difference between the groups

**Figure I:-** Percentage wise distribution of answers to the questionnaire by three different groups.



**Table II:- Multiple Comparisons Between Groups.**

		MEAN DIFFERENCE	STD. ERROR	SIG	95%CONFIDENCE INTERVAL	
					LOWER BOUND	UPPER BOUND
GROUP A	GROUP B	-3.6200	12.63	0.956	-42.4023	35.156
	GROUP C	-12.046	12.63	0.630	-50.829	26.7356
GROUP B	GROUP A	3.6200	12.63	0.956	35.163	42.402-
	GROUP C	-8.4266	12.63	0.790	-47.20	30.35
GROUP C	GROUP A	12.0466	12.63	0.630	-26.73	50.82
	GROUP B	8.42667	12.63	0.790	-30.355	47.20

**Discussion:-**

One study from Syria (7) demonstrates high number of medical students that are not vaccinated or not sure about their vaccination status, which puts them at a higher risk of being infected in the future. Another study conducted in Portuguese for workers of family health strategy programme, states only 66.1% were vaccinated, 52.5 % received three doses, 30.4 % verified immunization(8).

Despite the awareness of the basic medical sciences and the need for vaccination, before entering the clinics only 21% of the students have not completed the vaccination protocol. With the increase in the years of clinical practice and patient exposure there is an increase in the percentage of the vaccinated students. About 58.5% of students have been accidentally pricked by needle during practice but only 73.2% are aware of the active immunization available for hepatitis B and only 76% of them are aware of the booster doses for the vaccination. About 40.7% believe hepatitis B has no oral manifestation and hence are less capable of diagnosing or suspecting the infection and taking necessary precautions.

The increase in the years of clinical practice and specialization increases the knowledge attitude and practice of the dental students towards the control and prevention of the infection. Better knowledge attitude and practice among dental students can prevent Hepatitis B infection.

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