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**Original Research Article** 

# A Cross Sectional Study on Knowledge and Perceptions of First Year Medical Students about Hepatitis B Virus Infection

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#### **Abstract**

**Background:** Hepatitis B virus infection is one of the major causes of chronic liver disease. The prevalence of chronic hepatitis B virus infection in India is 1.46% with an estimated 17 million people who are chronic carriers of Hepatitis viral infection. Seroprevalence of HBV infection is few times higher among health care workers when compared to the general population. **Objectives:** To assess the knowledge and perceptions of first year medical students regarding HBV infection and vaccination. **Methodology:** This cross sectional study was carried out among first year MBBS students belonging to 2016-17 batch of Sri Siddhartha Medical College, Tumkur, Karnataka. A self structured objective type of questionnaire was prepared consisting of questions which were used to assess the knowledge regarding HBV infection and vaccination for it. The responses were analyzed using Microsoft excel and Epi Info 7. **Results:** 92.3% of the study population told that they have heard about hepatitis and 78.46% were also aware that the primary organ affected in hepatitis is liver. 87.69% responded that they were aware of hepatitis being transmitted from person to person. 89.23% of the study population had correct knowledge about the mode of transmission. **Conclusion:** It is recommended to increase the awareness of importance of vaccination against HBV at the beginning of the medical course and consider to vaccinate all of them before they are exposed to the patients during their clinical postings.

Keywords: Hepatitis B Virus infection, chronic liver disease, medical students.

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# Introduction

Dietary habits is one of the important lifestyle behavior which helps in enhancing the good health of the individual. A balanced and healthy diet includes consumption of lots of vegetables, fruits and dietary material containing vitamins and minerals [1]. Healthy eating is influenced by various social and economic factors [2]. Unhealthy dietary habits picked up in adulthood will lead to increased risk of development of lifestyle diseases like obesity and diabetes. Students starting university education may experience difficulties in maintaining healthy eating habits because of various academic stressors and problems in adjusting to hostel environment [3]. These acquired behaviors which includes unhealthy eating habits if picked up in college could persists throughout the adult life and lead to various detrimental consequences [4]. Medical students with their medical knowledge are expected to maintain good healthy eating habits. Inspite of having sufficient knowledge about the importance of eating healthy they experience greater difficulty in putting this background knowledge into practice because of various academic challenges and time issues faced by them [5]. The various challenges of university education and academic challenges of studying medicine is known to affect their dietary patterns [6]. Cultivation of healthy dietary practices assumes importance in medical students because as future doctors in the community it is important to maintain personal healthy lifestyle which will help them to guide their patients regarding the importance of maintaining a healthy diet [7]. Hence the study was taken up to assess the eating habits and perceived barriers to maintain healthy dietary habits of first year medical students.

# MATERIALS AND METHODS

This cross sectional study was carried out among first year MBBS students belonging to 2016-17 batch of Sri Siddhartha Medical College, Tumkur, Karnataka after obtaining the approval of institutional ethical committee. All the 130 students were enrolled in the study. A self structured questionnaire was prepared

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consisting of questions which were used to assess the dietary habits of the study population. Informed consent was taken and the confidentiality was maintained

during the process of this survey. The responses were analyzed using Microsoft excel and Epi Info 7.

#### **RESULTS**

Table-1: Age and gender distribution

	Mean Standard deviation	Mean Standard deviation
Age of the subject	18.05	0.52
Sex	Frequency	Percentage
Female	72	55.38
Male	58	44.61

**Table-2: Characteristics** 

Characteristics	
Consumption of all 3 major meals	63 (48.46%)
Skipping of breakfast	53 (40.76%)
Skipping of lunch	16 (12.3%)
Skipping of dinner	5 (3.84%)
Fruits	32(24.61%)
Vegetables	73 (56.15%)
Soft drinks	63 (48.46%)
Salted snacks	78 (60%)
Fried food & chats	81 (62.30%)

Table-3: Perceived barriers

Perceived barriers	
(a) Skipping meals	
No time	61 (46.92%)
Weight control	6 (4.61%)
(b) Healthy dietary habits	
Lack of time	63 (48.46%)
Lack of knowledge	3 (2.30%)
Stress	37 (28.46%)
Taste preferences	53 (40.76%)

## **DISCUSSION**

Among the study subjects 58 (44.61%) were males and 72 (55.38%) were females. Mean age of the study subjects was 18.05. In the present study the assessment of dietary pattern revealed that 63 (48.46%) reported to consumption of all 3 major meals in a day. Skipping of breakfast was seen in 53(40.76%), skipping of lunch 16(12.3%) and skipping of dinner 5 (3.84%) was reported.

In other study done by Manigeh Alavil were they studied dietary habits among adolescent girls they found that 48.4% skipped breakfast and 8.3% skipped lunch [8].

About 32(24.61%) of the respondents reported to consumption of fruits everyday. 73(56.15%) said that they ate vegetables regularly on a daily basis. 63(48.46%) of the study population reported to consumption of soft drinks. 78(60%) of the study population ate salted snacks and 81(62.30%) ate fried food and chats on a regular basis.

In another study done Sami H Alzahrani and et al. were they studied eating habits among medical students at King Abdulaziz University at Saudi Arabia have found that only 20.4% consumed vegetables and 11.9% of the study population consumed fruits on a daily basis [9].

In the present study the assessment of perceived barriers revealed that 61(46.92%) reported that having no time as the reason for skipping meals. 6(4.61%) reported that a skipped meals to control weight. Assessment of dietary habits revealed that lack of time in 63(48.46%) was the reason for them not to maintain a healthy dietary habit. Lack of knowledge regarding healthy dietary habits was found in 3 (2.30%) of the study population. 37(28.46%) reported academic stress as the reason for not maintaining a healthy dietary habit. 53(40.76%) reported that taste preference was the reason for them not to adhere to a healthy dietary habit.

In another study done by Rubina A Sajwani when they compared the barriers to healthy lifestyle among medical and non medical students they found

that lack of time was the reason among 52.3% of medical students and 57.1% in non medical students as the reason for skipping meals [10].

## **CONCLUSION**

The assessment of dietary pattern in the present study revealed that there is increased intake of soft drinks, salted snacks and fried foods when compared with the consumption of fruits and vegetables. So it is advised to increase the awareness among medical students regarding practice of healthy dietary habits and maintenance of healthy lifestyle practices.

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