

## Preventive practices of nurses against Hepatitis B infection

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### ABSTRACT

**Background:** Nurses, being exposed to the blood and blood related products, should be familiar with epidemiological aspects of Hepatitis B infection.

**Aim:** To assess the preventive practices of nurses of a tertiary care hospital against Hepatitis B infection.

**Methods:** This cross sectional study was conducted in Mayo Hospital, Lahore from December 2017 to May 2018 to assess the preventive practices of nurses against Hepatitis B infection. A validated questionnaire was used. The study participants were 120 staff nurses, included by non-probability convenient sampling. The participants were explained regarding study protocol and their consent was obtained. The study participants were interviewed according to the questionnaire. Data were entered in SPSS 20 and was presented as frequency tables.

**Results:** Out of 120 nurses, 70% of the nurses got good knowledge of hepatitis B infection consequences, whereas around 98% of respondents knew about its transmission. Regarding preventive practices against hepatitis B, 65.8% got screened while 55.8% were vaccinated against Hepatitis B. Out of total, 95.8% and 45.8% were of practice of avoiding needle sharing and changing gloves before every sampling respectively. Among 120 nurses, 42.5% nurses practiced the reporting of needle prick events to the health authorities.

**Conclusion:** The preventive practices of nurses of a tertiary care hospital against hepatitis B infection are optimal.

**Key words:** Preventive, Practice, Hepatitis B, Infection, Nurses

### INTRODUCTION

Hepatitis B is a viral infection causing acute and chronic liver disease. This is one of the major of blood borne infection and threat to hospital personels.<sup>1</sup> Hepatitis B virus carriers lead to high prevalence of infection in general population.<sup>2</sup> The medical and paramedical personals may get infected and subsequently transmit the disease.<sup>3</sup> Due to frequent contact of nurses with blood and blood related products, they are at highest risk of getting infection. The nursing staff should be familiar with treatment and epidemiological aspects of diseases such as transmission, prevention and control.<sup>1</sup>

This is vital to study the level of information and preventive practices Hepatitis B infection, leading to safety to the society. Therefore, this study was designed to assess the preventive practices of nurses of a tertiary care hospital against Hepatitis B infection.

### MATERIAL & METHODS

This cross sectional study was conducted in Mayo Hospital, Lahore from December 2017 to May 2018 to assess the preventive practices of nurses against Hepatitis B infection. A validated questionnaire was used. The study participants were 120 staff nurses, included by non-probability convenient sampling. The participants were explained regarding study protocol and their consent was obtained. The study participants were interviewed according to the questionnaire. Data were entered in SPSS 20 and was presented as frequency tables.

### RESULTS

Present study had 120 nurses as its study population. Out of 120 nurses, 70% of the nurses got good knowledge of hepatitis B infection consequences, whereas around 98%

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Table 1: Demography and core knowledge of nurses regarding Hepatitis B infection (n=120)

		n (%)
Age (years)	18-29	52(43.3)
	30-39	53(44.2)
	40-49	14(11.7)
	>49	1 (0.8)
Work experience (years)	<5	38(31.7)
	5-15 yrs	72(60.0)
	>15 yrs	10 (8.3)
Hepatitis B infection causes liver cancer	Yes	84(70.0)
	No	31(25.8)
	Don't Know	5 (4.2)
Carriers of Hepatitis B infection can transmit infections to others	Yes	118(98.3)
	No	1 (0.8)
	Don't Know	1 (0.8)
Spread of Hepatitis B infection through contaminated body fluids	Yes	119(99.2)
	No	1 (0.8)
Availability of vaccine against hepatitis	Yes	114(95)
	No	5 (4.2)
	Don't Know	1 (0.8)

Table 2: Preventive practices of nurses against Hepatitis B infection (n=120)

Screening for Hepatitis B infection	Yes	79(65.8)
	No	41(34.2)
Vaccinated against Hepatitis B infection	Yes	67(55.8)
	No	53(44.2)
Frequent hand washing	Yes	118 (98.3)
	No	2 (1.7)
Changing gloves before every sampling	Yes	55(45.8)
	No	65(54.2)
Self-protection from uncapped needles	Yes	27(22.5)
	No	93(77.5)
Use of tray to carry sharp instruments	Yes	115(95.8)
	No	5 (4.2)
Avoiding from needle sharing	Yes	105(87.5)
	No	15(12.5)
Reporting to health authorities after needle prick injury	Yes	51(42.5)
	No	69(57.5)

of respondents knew about its transmission (Table 1). Regarding preventive practices against hepatitis B, 65.8% got screened while 55.8% were vaccinated against Hepatitis B. Out of total, 95.8% and 45.8% were of practice of avoiding needle sharing and changing gloves before every sampling respectively. Among 120 nurses, 42.5% nurses practiced the reporting of needle prick events to the health authorities (Table 2).

## DISCUSSION

Present study had nurses as its study population. Results of present study revealed that 70% of the nurses got good knowledge of hepatitis B infection consequences, whereas around 98% of respondents knew about its transmission. Our results are consistent with the results from Khan et al<sup>1</sup> from Pakistan and Mehriban et al<sup>2</sup> and Setia et al<sup>4</sup> from India. However, our results are in contrast from Noman et al<sup>5</sup> from Quetta, Pakistan where authors found low level of knowledge of hepatitis B infection.<sup>5</sup> This difference may be due to the variation in population and sample size.

Regarding preventive practices against hepatitis B, 65.8% got screened while 55.8% were vaccinated against Hepatitis B. Out of total, 95.8% and 45.8% were of practice of avoiding needle sharing and changing gloves before every sampling respectively. These results are in accordance with Reang<sup>6</sup> and Dillee et al<sup>7</sup> from nursing students in Nepal. These results are also similar to those from Tazeem et al<sup>8</sup> from Pakistan. However, this was very unfortunate observation from present study that we found only 55.8% completely vaccinated against Hepatitis B. Shagufta et al<sup>9</sup> also found similar results from Islamabad and, Pakistan where vaccination status was (57.6%)<sup>9</sup>.

Present study has certain limitations. This study was hospital-based and single centered. The study population was only nurses of single center, so generalization may not be done. Further studies are recommended.

## CONCLUSION

We found from present study that preventive practices of nurses of a tertiary care hospital against hepatitis B infection are optimal.

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**Conflict of interest:** None

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