

Hepatitis Awareness Assessment in Nursing Staff of a Tribal District Hospital of South India

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Abstract

Background: The study was carried out to know the knowledge and attitudes towards Hepatitis B patients and factors influencing patient care among nurses in a tribal district hospital since nurses are responsible for constant care of patients and they should be completely aware of every aspect of viral hepatitis. **Materials and Methods:** A pre-designed questionnaire with 20 questions pertaining to knowledge and awareness about Hepatitis B and attitude towards care was given to the nurses 96 nurses of the tribal district. **Result:** Staff nurses of the region have mixed level of understanding regarding Hepatitis B. But most of them want to upgrade their knowledge and have keen interest for further training. **Conclusion:** The awareness and training regarding Hepatitis is urgent need of hour for the nursing staff of the region.

Keywords: Awareness about hepatitis, Hepatitis, Nursing staff

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Introduction

In this century, hepatitis viral infection is one of the major public health problems in the world. It is an important cause for acute and chronic hepatitis, cirrhosis of liver and hepatocellular carcinoma.¹ Although seroprevalence studies reveal that 90% to 100% world population acquires hepatitis A viral antibody and becomes immune by adolescence but still Hepatitis B is one of the important viral hepatitis² and leads to numerous deaths every year. Worldwide 2 billion people have been exposed to hepatitis B, in which more than 350 million people are chronically infected with this virus.³

Among the various paramedical staff, nurses are very important component in health care delivery system as they are the one who are responsible for constant care of inpatients.⁴ Staff nurses involved in the management of patients of chronic hepatitis is well positioned to provide supportive care and contribute to development of effective treatment.⁵ It is also important that the staff nurses are completely aware of every

aspect of viral hepatitis as it is estimated that the attributable fraction for occupational exposure is 37% for hepatitis B and 39% for hepatitis C.⁶

Rajiv Gandhi Institute of Medical Sciences (RIMS) Adilabad is a tertiary care centre of north Telangana region of Andhra Pradesh, India. It is a tribal district with majority of population living in rural areas.⁷ Staff nurses posted in RIMS Adilabad belong to the same district or from surrounding districts. This study was carried out to determine the level of correct knowledge about Hepatitis-B and attitudes towards the care of Hepatitis-B positive patients and whether various factors influence patients care practices by the nursing staff of this underdeveloped tribal region of Andhra Pradesh.

Materials and Methods

In this cross sectional study, nursing staff of RIMS Adilabad was included. Among the almost 250 nurses working in the institute, a total of 102 staff nurses including one male

nurse were enrolled for the study. Out of 102 nurses, questionnaires of 96 nursing staff which were completely filled included in the final analysis of the study and six questionnaires were excluded being incomplete. Oral informed consents were secured from each subject to participate after explaining the nature, purpose and benefits of the study. Permission for the study was granted by the institutional authorities. A pre-designed, pre-tested and self-administered questionnaire with questions pertaining to knowledge and awareness about Hepatitis B and attitude towards care of such patients was given to the nurses. A total of 20 questions were given excluding the demographic characteristics of nurses such as: age, sex, and level of education and experience. The purpose of the study was explained to all the participants. Identity of nurses and their scores were not revealed to them and others.

Results

In the present study out of a total of 96 nurses, 86 were staff nurses and 2 head nurses. 4.16% nurses even did not hear about viral hepatitis. 73.95% nurses were aware about hepatitis because training they received during their education while influence of government authorities and peer group was least (2.08).

4.16% nurses thinks that Hepatitis B is a bacteria and 2.08% thinks it is fungus while majority of nurses (93.75%) thinks it is a virus (**Table-1**). 17.08% nurses answered correctly that hepatitis viral infection is 5 types (A, B, C, D, E) while rest did not correctly answer. Mode of transmission was correctly cited by 73.95% nurses while 1.04% mentioned sexual activity and 21.8% cited blood and 3.12 mentioned mother to foetus as only mode of transmission for hepatitis infection (**Table-1**). 6.25% thinks that transmission of infection through infected needles is not possible and 56.25% thinks that it can be transmitted by kissing.

Most of the nurses (93.75%) are interested for further education and training about Hepatitis- B infection. 18.75% were not exposed to hepatitis patient previously. 2.08% were not shown interest for caring such patients in future, even

18.75% want to get transfer if forced to take care of Hepatitis B cases. 59.37% thinks they will not receive any service promotions even after serving hepatitis patients although some (38.54%) are expecting promotions after providing good care to the patients. 8.33% want a right to refuse to care for hepatitis B patients since almost 25% have fear about hepatitis infection transmission to them because 46.87% of them are not fully aware of the infection (**Figure- 1**).

Table- 1: Type & Transmission

| Hepatitis B is? | Number | Percentage |
|--------------------------|--------|------------|
| Bacteria | 04 | 04.16 |
| Virus | 90 | 93.75 |
| Fungus | 02 | 02.08 |
| Mode of Transmission is? | | |
| Sexual activity | 01 | 01.04 |
| Blood | 21 | 21.87 |
| Mother to foetus | 03 | 03.12 |
| By all three | 71 | 73.95 |

As far as needle destruction is concerned, 91.66% mentioned needle destroyer as a ideal method to dispose needles and syringes while 6.25% cited recapping of needle is sufficient. 39.55% were unaware about Hbs-Ag as a diagnostic test for hepatitis and even 20.8% were totally unaware about any diagnostic test. 1.04% nurses were unable to answer about when to start management after accidental exposure to infection (**Figure - 2**).

Discussion

Our results indicate that staff nurses of the region have mixed level of understanding regarding Hepatitis B. But most of them want to upgrade their knowledge and have keen interest for further training. Their lack of awareness might be because of the district which is tribal in nature with majority of population living in rural cum tribal areas⁷ and most of the nurses of the hospital belong to the same district or from surrounding regions.

Figure- 1: Questionnaire

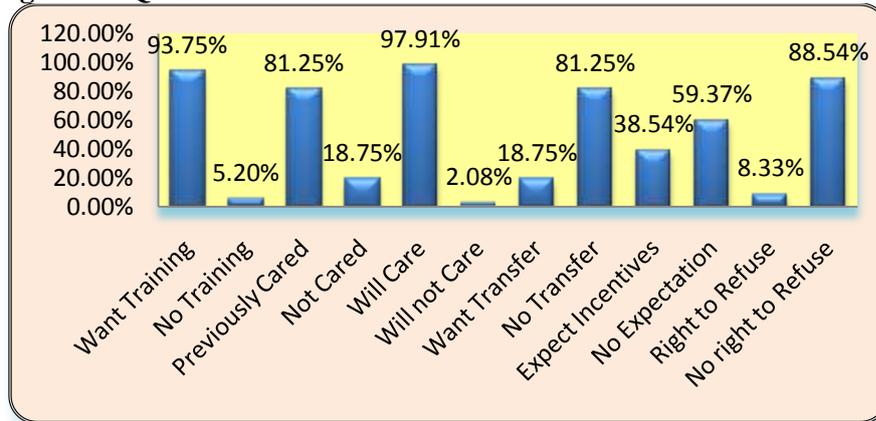
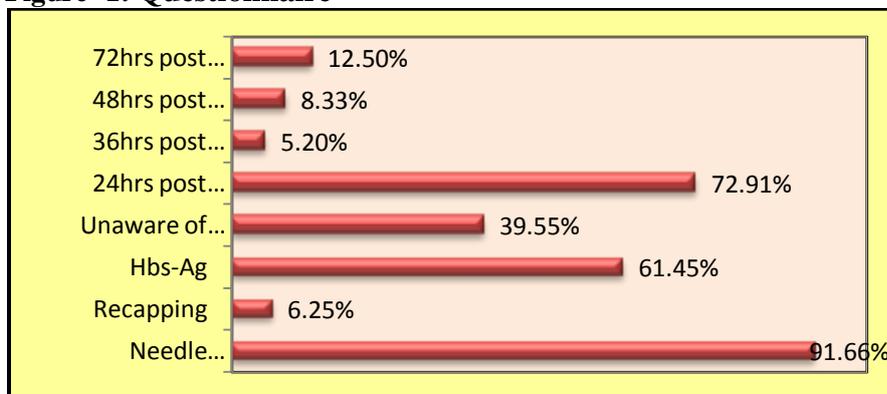


Figure- 1: Questionnaire



Shagufta Hussain et al³ in Islamabad Pakistan conducted the study in health care workers to find out the prevalence of Hepatitis B and C, vaccination status and about the knowledge of disease and its prophylaxis. They found that percentage of health care workers vaccinated was low and the main factor responsible was awareness and attitude problem among them. Half of the studied population was unaware of the precise post exposure prophylaxis. They recommended that there is a need to educate their health care workers through a well organized infection control program, spreading awareness and education of infection control measures, diseases transmissions and post exposure prophylaxis so that a change in attitude can be achieved successfully. McKeown M and Williamson D⁸ concluded that guidelines for safe practice are important measure in preventing HIV and Hepatitis B infection in health care staff. But they found that there is no difference in practice between staff who had read the guidelines and those who had not. McGrane J and Staines A⁹ in Dublin, Ireland hospital found high level of awareness and positive attitude among nursing staff and

nursing staff had good understanding about hepatitis B. Salehi AS and Garner P⁶ in Kabul Afghanistan observed a low level of knowledge of the basic principles of universal precautions among the hospital staff. Moreover, many of their respondents assume that universal precautions should not be applied to patients with HIV and viral hepatitis only. They think isolation is necessary for patients with blood-borne infections, and that needles can be recapped after an injection. They concluded that the country needs a compulsory training program in universal precautions for health staff. Salwa A Mohamad and Alaa M Wafa¹⁰ in Egypt observed that hepatitis C educational program for healthcare workers improved knowledge and practice and decrease occupational risk from blood borne infection after implementation of program. They recommended that continuing education programs are needed to increase awareness in various risk groups in their country.

Conclusion

We recommend that continued medical education and repeated training programs are the need of hour for this region. Such programs will be highly effective since the nurses are also interested for up gradation of their knowledge and skills. Knowledge of nurses about viral hepatitis and its transmission and prevention can stop the spread of this condition in this tribal region and among the tribal cum rural population which will be a great service for the region.

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References

1. Chung PW, Suen SH, Chan OK, Lao TH, Leung TY. Awareness and knowledge of Hepatitis B infection and prevention and the use of hepatitis vaccination in the Hong Kong adult Chinese population. *Australian Journal of Basic & Applied Sciences* 2012; 125(3): 422-7.
2. Acharya SK, Madan K, Dattagupta S, Panda SK. Viral hepatitis in India. *Natl Med J India*. 2006;19(4):203-17.
3. Hussain S, Patrick NA, Shams R. Hepatitis B and C prevalence and prevention awareness among health care workers in a tertiary care hospital. *International Journal of Pathology* 2010;8(1):16-21.
4. Goel NK, Bansal R, Pathak R, Sharma HK, Aggarwal M, Luthra SC. Knowledge and awareness of nursing students about HIV/AIDS. *Health and Population: Perspectives* 2010;33(1):55-60.
5. Olson M, Jacobson IM. Role of the nurse practitioner in the management of patients with chronic hepatitis C. *J Am Acad Nurse Pract* 2011;23(8):410-20.
6. Salehi AS and Garner P. Occupational injury history and universal precautions awareness: a survey in Kabul hospital staff. *BMC Infectious Diseases* 2010;10:19.
7. National informatics centre Adilabad, Official website of Adilabad collectorate.mht, {accessed on June 28, 2012}. Available from: <http://www.adilabad.ap.gov.in>
8. McKeown M, Williamson D. Awareness and practice of HIV and Hepatitis B guidelines in a psychiatric hospital. *Health Bull (Edinb)* 1992;50(4):292-5.
9. McGrane J, Staines A. Nursing staff knowledge of the hepatitis B virus including attitudes and acceptance of hepatitis B vaccination: development of an effective program. *AAOHN J* 2003;51(8):347-52.
10. Mohamed SA and Wafa AM. The effects of an educational program on nurses knowledge and practice related to hepatitis C virus: A pretest and posttest Quasi-experimental design. *Australian Journal of Basic and Applied Sciences* 2011;5(11):564-570.