A study on Awareness And Practice Of Hepatitis-B disease prevention Among Nursing Staff Of Government General Hospital, Vijayawada.

Dr. Dilip Kumar K B1, Dr. Muthangi Sandhya Rani2.

1. Post Graduate, Department of Community Medicine, Siddhartha Medical College, Vijayawada, A.P.
2. Assistant Professor, Department of Community Medicine, M.N.R Medical College and hospital, Fasalwadi, Medak district, Telangana.

Abstract: Background: Chronic Hepatitis B is an important global health problem, with more than 350 million individuals affected worldwide. Its prevalence in India and many other parts of the Asia-Pacific region is quite high. More than 10,000,000 Indian children run a lifetime risk of becoming chronic carriers and about 1,00,000 Indians die from HBV related complications annually. A decision analytical model estimates that in India, vaccination would save 25 lives per 1 lakh population per year. Hence the present study has been conducted to know the awareness of nurses about this disease as they constitute people at major risk for HBV infection.

Materials and methods: Type of study: Cross sectional descriptive observational study.

Duration: 1 month 15 days [August 1st - September 15th 2017] Study population: Nursing staff of GGH, Vijayawada. Study instrument: A Pre-designed, pre-tested, closed ended questionnaire was administered to the participants after obtaining their informed consent. Data collected was analyzed using MS Excel and SPSS V.20

Results: Of the 198 study respondents, majority of them (54.5%) acquired knowledge regarding Hepatitis B from Doctors. Conclusion: From the above study, we come to know that even though majority of them are aware of the disease and its modes of transmission, practice of preventive measures is very low. Very low percentage of nursing staff are fully immunized which reflects the need of their proper education of the disease and motivate them to get the Hepatitis B vaccine.

Date of Submission: 29-03-2019 Date of acceptance: 13-04-2019

I. Introduction

Healthcare workers have a high risk of occupational exposure to many blood-borne diseases including HIV, Hepatitis-B, and Hepatitis-C viral infections. Of these, Hepatitis B is not only the most transmissible infection, but also the one that is preventable by vaccination.1 In India, the carrier rate of Hepatitis B is higher among health care personnel. In India, the prevalence of HbsAg is 3%-4.2% with over 40 million HBV carriers.2 Every year over 1,00,000 Indians die of Hepatitis-B related complications.3 Hence, the present study has been conducted to know the awareness among nurses about this disease as they constitute people at major risk for HBV infection.

II. Objectives

To know the level of knowledge of Hepatitis-B disease and its prevention among nursing staff.

To know the proportion of nursing staff practicing various preventive measures to protect themselves from acquiring Hepatitis B infection.

III. Material And Methods

TYPE OF STUDY - Cross sectional Observational study
DURATION OF STUDY - 1 month 15 days [August 1st - September 15th 2017]

STUDY SETTING – Government general hospital, Vijayawada
STUDY POPULATION – Nursing staff of GGH
STUDY INSTRUMENT - Semi-Structured questionnaire.

METHODOLOGY

As per the information collected from nursing superintendent, the total nursing staff in GGH were found to be 222 in number

↓

Out of the 222 nursing staff, a total of 198 staff members who have given their verbal consent to participate in the study were included.

↓

Nursing staff available in all the patient care areas are included.

↓

Exclusion criteria- those nurses, who haven’t given their consent were excluded.

DOI: 10.9790/0853-1804101720 www.iosrjournals.org 17 | Page
IV. Result

Table 1 - Socio-demographic profile of the study respondents

<table>
<thead>
<tr>
<th>socio-demographic variable</th>
<th>percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>72(36.4%)</td>
</tr>
<tr>
<td>35-44</td>
<td>90(45.4%)</td>
</tr>
<tr>
<td>45-54</td>
<td>36 (18.2%)</td>
</tr>
<tr>
<td>2. Educational qualification</td>
<td></td>
</tr>
<tr>
<td>GNM (general nursing &amp; midwifery)</td>
<td>126(63.6%)</td>
</tr>
<tr>
<td>B.Sc.,nursing</td>
<td>72(36.4%)</td>
</tr>
<tr>
<td>3. Work experience</td>
<td></td>
</tr>
<tr>
<td>1-5 yrs</td>
<td>54(27.2%)</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>18(9.2%)</td>
</tr>
<tr>
<td>10-15 yrs</td>
<td>72(36.4%)</td>
</tr>
<tr>
<td>16-20 yrs</td>
<td>54(27.2%)</td>
</tr>
</tbody>
</table>

Table 1 shows that majority of the nursing staff (45.4%) belong to the 35-44yr age group, and most of them (63.6%) have completed GNM course, majority (36.4%) have work experience of 10-15 yrs.

![FIG 1- Source of knowledge about Hepatitis B](image1)

FIG 1- shows that majority of the nursing staff (68%) gained knowledge of the Hepatitis B disease from Doctors.

![FIG 2- AWARENESS ON MODES OF TRANSMISSION](image2)

FIG 2- shows that only 49% of the nursing staff know about all the possible modes of transmission of Hepatitis B.
A study on Awareness and Practice of Hepatitis-B disease prevention among nursing staff of...

**FIG 3** - AWARENESS REGARDING CORRECT VACCINATION SCHEDULE OF HEPATITIS B VACCINE

![Pie chart showing awareness of correct vaccination schedule.]

FIG 3: shows that majority (76%) of the nursing staff don't know the correct vaccination schedule of Hepatitis B.

**FIG 4** - HEPATITIS-B VACCINATION STATUS AMONG NURSING STAFF

![Bar chart showing vaccination status.]

FIG 4 shows that of the 198 nursing staff, only 72 (36.3%) have taken all the 3 doses of Hepatitis B vaccine. It can be observed from fig 4 that majority are partially immunized (taken only 1 or 2 doses of vaccine.)

**FIG 5** - REASONS FOR NON-IMMUNIZATION (n=41)

![Pie chart showing reasons for non-immunization.]

FIG 5 shows that of the 41 (20.7%) non-immunized nursing personnel, majority of them (56%) said lack of time being the reason for not taking vaccine.
FIG 6- PROPORTION OF NURSING STAFF USING PERSONAL PROTECTIVE MEASURES TO AVOID VARIOUS INFECTIONS

![Graph showing proportion of nursing staff using personal protective measures](image)

FIG 6 shows that of the study respondents only 34.3% are found to be regularly using personal protective measures like gloves and masks during patient care.

Table 2 - ASSOCIATION BETWEEN AWARENESS LEVELS OF THE DISEASE AND VACCINATION STATUS OF THE NURSING STAFF

<table>
<thead>
<tr>
<th>Knowledge Score</th>
<th>Fully Immunized</th>
<th>Partially Immunized and Not Immunized</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge &gt; 50%</td>
<td>39</td>
<td>54</td>
<td>93</td>
</tr>
<tr>
<td>Knowledge &lt; 50%</td>
<td>33</td>
<td>72</td>
<td>105</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>126</td>
<td>198</td>
</tr>
</tbody>
</table>

For the above table chi-square statistic is 2.3528 at df (1) and p-value is 0.12. The result is not significant at p<0.05.

Interpretation - There is no significant association between awareness of the disease and vaccination status.

V. Discussion

In the present study, it was observed that only 36.3% are fully immunized against Hepatitis B. Similar findings of low vaccination rates are found in a study done by Iqbal Qazi M et al in a tertiary care hospital in North India, where only 29.9% are fully vaccinated among nursing staff. Similar results of vaccination rates were reported by Shrestha and Bhattarai and Imam et al. In our study it was observed that 49% of the nursing staff know about all the possible modes of transmission of Hepatitis B, which is in contrast to a similar study done in teaching hospital in north India among 195 nursing staff by Amanpreet Kaur et al where only very few subjects (1.8%) could correctly identify all the possible route of transmission of virus.

VI. Conclusion

1. From the above study, we came to know that even though majority of them are aware of the disease and its modes of transmission, practice of preventive measures is low.
2. About one-third of nursing staff are fully immunized which reflects the need of their proper education of the disease and motivate them to get the Hepatitis B vaccine.
3. The government should take initiative of conduction regular vaccination camps and provide the Hepatitis B vaccine at subsidized rates to improve the vaccination rates.

References

[5]. Amanpreet Kaur et al. Awareness, Attitude and Vaccination Status Regarding Hepatitis B among Staff Nurses of a Teaching Hospital in North India. OHDM - Vol. 15 - No.4 - August, 2016