

KNOWLEDGE AND PRACTICE REGARDING PREVENTION OF HEPATITIS B AMONG NON-GAZZETED STAFF OF TERTIARY CARE TEACHING HOSPITAL IN PRIVATE SECTOR, LAHORE

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ABSTRACT

A descriptive and cross sectional study was conducted among non-gazetted staff of a Tertiary Care Hospital in Lahore from January 2012 to July 2012.

Objective: The objective was to assess the level of knowledge and practice regarding prevention of Hepatitis B and explore the gaps between knowledge and actual practice for disease prevention.

Methodology: A sample of fifty six non-gazetted staff (appointed 3 months earlier on regular basis) was taken through systematic random sampling. A pre-tested structured questionnaire was used after taking verbal consent from the respondents.

Results: Out of total fifty six, 26 (46.4%) were females. The mean age was 27.45 ± 08.41 years and 34 (60.7%) were having income / capita / month < Rs. 3000. Good knowledge regarding this viral disease was present in 30 (53.6%) respondents. But 47 (83.9%) were well informed that disease spreads through blood transfusion and from person to person. Also 48 (85.7%) were aware that needle stick injury can lead to disease transmission. Knowledge of disease transmitting sexually was positive among 44 (78.6%) respondents and through unhygienic dental procedure was positive among 45 (80.4%) respondents. Regarding practices 25 (44.6%) had full course of immunization and 53 (94.6%) were properly disposing off used needles and 31 (55.4%) were insisting on change of razors at barber's shop. It was also observed that 38 (67.9%) respondents were using gloves before handling the instruments and 28 (50%) got accidental needle prick in last calendar year. Out of total fifty six, 46 (82.14%) had satisfactory / good knowledge. However paramedics as compared to auxiliary staff showed good knowledge (P -value = .0036) and also good practice (P -value = .0031). These significant statistics of the hospital staff are very encouraging, as they revealed satisfactory / good knowledge (82.14%) satisfactory / good practice (69.94%), so the gap of 12.50% can be overcome by continuous awareness campaigns by hospital authorities. However full course of immunization doesn't depend on income / capita / month (P -value = 0.0602) and on gender (P -value = 0.775).

Conclusion: The present study concludes that there is a gap between knowledge and practices among non-gazetted staff. Repeated awareness sessions should be launched to overcome this gap and subsidized full immunization package should be provided at recruitment time to hospital non-gazetted staff.

Key Words: Hepatitis B, KAP study for Hepatitis B. Preventive measures of Hepatitis B.

INTRODUCTION

"This is hepatitis, know it, confront it", this was the message given by WHO on 28th July, 2013 on world hepatitis day. According to the World Health Organization (WHO), an estimated two billion people have been infected with hepatitis B with more than 240 million people having a chronic hepatitis B infection, which can lead to developing cirrhosis, liver failure and liver cancer. Approximately 600,000 people die every year due to the consequences of hepatitis B.¹ The global prevalence of HBV infection varies widely, from high endemic areas $\geq 8\%$ (Africa, Asia and Western

Pacific) to intermediate 2% – 7% (Southern and Eastern Europe) and low < 2% (Western Europe, North America, and Australia).¹

National survey of Pakistan which was the first ever survey on hepatitis B conducted in 2011² revealed that there are 12.3 million people infected with hepatitis B or C in Pakistan.² In order to ascertain the exact figure of prevalence, Govt. of Pakistan, Islamabad conducted a survey in collaboration with ministry of health, standing committee on Economic affairs and Federal Board of statistics which showed 2.5% prevalence of hepatitis B in general population.³ Province wise it

is: 2.4% in Punjab, 4.3% in Baluchistan, 2.5% in Sind, 1.3% K.P.K.³ These figures are very alarming and significant, but bright side of the picture is that disease can be prevented by creating awareness regarding prevention especially in health facilities and hospital settings and Hepatitis B immunization. The survey revealed that majority of the people infected were adult males (7.6% of the sample), to which the report blamed the use of unsterilized razor blades in barber shops.² The report attributed the increasing prevalence of hepatitis cases to the use of used syringes and administration of unnecessary injections.² The outcome is that knowledge about disease transmission is poor. The present study in the tertiary care hospital was to assess the gap between knowledge and practices among the non-gazetted staff regarding hepatitis B prevention.

The outcome of the study will guide to fight against the emerging epidemic of hepatitis B prevalence which is a vaccine preventable disease.

METHODOLOGY

It was a descriptive cross sectional study conducted at a 300 bedded private sector, Akhtar Saeed Trust Teaching Hospital (ASTTH) Lahore; the study lasted for six months duration from Jan, 2012 – July, 2012. Total fifty six non-gazetted workers fulfilling inclusion criteria of regular employees of ASTTH appointed almost 3 months earlier were taken into study through systematic random sampling. Those who were on daily wages and trainees were excluded from the study. Respon-

dents included Paramedics (Nurses, Pharmacy Workers, Operation Theater and Lab Technicians, Radiographers) and auxillary staff (Ward boys, sanitary workers, gardeners, peons, guards and ayyas).

The consent was taken, and information was collected through pre-tested structured questionnaire. Response rate was 100%. In addition to the demographic data 15 questions explore knowledge towards hepatitis B and 8 questions addressed practices towards hepatitis B. knowledge was assessed by questions focusing on hepatitis B etiology and scoring was obtained on following criteria.

Knowledgeable person was one who can answer correctly six or more than six questions. Scoring was, Zero for no knowledge, 1 – 5 for poor, 6 – 10 for satisfactory and more than 10 correct answers were considered to be a good knowledge. Similarly those respondents who scored 3 or more than three score were considered as performing satisfactory / good practice. Scoring was Zero = No practice, 1 – 2 for Poor, 3 – 4 for satisfactory, ≥ 5 were good. All the data was entered in statistical package for social sciences (SPSS) v 16.0 for data analysis.

RESULTS

Demographic profile showed that out of 56 respondents, 34 (60.7%) were females. The mean age was 27.45 ± 08.41 years. Twenty two respondents (39.3%) were showing family member’s ≤ 6 and twenty six (46.4%) were living below the poverty line. Indepth

Table 1: *Analysis of Knowledge.*

	<i>Frequency</i>	<i>Percentage</i>
0 = No knowledge	4	7.1
1 – 5 = Poor knowledge	6	10.7
6 – 10 = Satisfactory knowledge	16	28.6
> 10 = Good knowledge	30	53.8
Total	56	100

Table 2:

	<i>Frequency</i>	<i>Percentage</i>
0 = No Practice	1	1.8
1 – 2 = Poor Practice	16	28.6
3 – 4 = Satisfactory Practice	24	42.9
4 – 5 = Good Practice	15	26.8
Total	56	100

Table 3: *Analysis of Knowledge, Analysis of Practice Cross Tabulation.*

<i>Knowledge</i>		<i>Analysis of Practice</i>			<i>Total</i>
	0 = No practice	1 – 2 = Poor practice	3 – 4 = Satisfactory	4 – 5 = Good practice	
0 = No knowledge	0	3	1	0	4
1 – 5 = Poor knowledge	0	6	0	0	6
6 – 10 = Satisfactory knowledge	0	2	9	5	16
> 10 = Good knowledge	1	5	14	10	30
	1	16	24	15	56

knowledge of Hepatitis B disease was positive for 42 (75%) respondents and 30 (53.6%) were aware that it is a viral disease. 33 respondents (58.9%) shared this knowledge from colleagues. 47 (83.9%) were aware that disease is transmitted from person to person and it is a blood borne infection. 48 (85.7%) were aware that needle stick injury can cause this disease. Ten respondents (17.9%) were unaware that dental procedure can transmit this disease. 42 (75%) of the people were aware that contaminated ear / nose piercing can result in disease. Similarly 33 (58.9%) respondents were aware that tattoo with contaminated need by can result in disease. Thirty eight (67.9%) were aware that sharing tooth brushes can result in diseases 44 (78.6%) were aware that disease is sexually transmitted and 47 (83.9) said sharing of razors at barber's shop can cause disease. So the knowledge score for the entire study is as follows.

Regarding practices for the prevention of Hepatitis B disease, 25 (44.6%) had full course of immunization. 18 (23.1%) were not using gloves while handling instruments. Eleven (19.6%) had blood transfusion taken but were not aware it was screened before or not. However 53 (94.6%) were aware that needles should be properly disposed off after use. 31 (55.4%) were practicing use of new blades and razors at barbers shop and 28 (50%) got accidental prick during last calendar year.

DISCUSSION

Hepatitis B is an important occupational hazard for health workers and its prevention is aimed at imparting knowledge and motivating people for practicing their knowledge in their daily life, as well as got vaccinated with currently available safe and effective vaccine. This study aimed at assessing the gap between knowledgeable paramedics and practicing paramedics and non-knowledgeable auxiliary staff and their practices, so the gap between knowledge and practices can be visualized and measures for its improvement can be taken. So 46 (82.2%) had satisfactory knowledge and 10 (17.8%) had poor knowledge. Similarly 39 (70%) showed good practice and 17 (30%) showed poor practice. So there is lack of knowledge regarding preventive measures and there is lack of practice of these measures.

Analysis of data also showed that difference in immunization against Hepatitis B in male and female workers is insignificant, (P-value = 0.775). However comparison of paramedics with non-paramedics and their knowledge is very significant (P-value = .0036). Similarly economic status and per capita family income did not play a role in full course of immunization

Table 4:

Variable	Complete Immunization		P-value
	Yes	No	
Gender			
Male	15	15	0.775
Female	12	14	
Occupation	Good knowledge		
Paramedics	29	1	0.0036
Non-Paramedics	17	9	
Occupation	Good practice		
Paramedics	26	4	.0031
Non-Paramedics	13	13	
Income / Capita / Month	Complete Immunization		
< Rs. 3000	9	17	0.602
> Rs. 3000	18	12	
Satisfactory Knowledge	Satisfactory Practice		
	Yes	No	
Yes	38	8	.0000272
No	1	9	

(P-value = .0602). It was also observed that paramedics were at good practice (P-value = .0031) (M.H 8.70) as compared to non-paramedics. Crosstabulation of knowledge and practice is very significant (P-value = .0000272).

A study conducted at public sector hospital in Lahore, regarding status of hepatitis B vaccination among the health care workers showed that 69 (19.27%) of the respondents (nurses and paramedics) were completely immunized⁴ but in this current study conducted at private sector 25 (44.6%) were fully immunized. A very good immunization status maintained as compared to public sector of 19%.

It is **concluded** that hospital staff showed satisfactory / good knowledge, 82.14% and satisfactory / good practice, 69.64%. So the gap of 12.50% can be minimized effectively by regular awareness campaigns by hospital management.

Recommendations

- Health education regarding hepatitis B transmission should be conducted at regular intervals in the hospital.
- At recruitment time all non-immunised Paramedics and non-Paramedics should get subsidised immunisation packages. An incentive in the form

of credit hours should be given to fully immunised personnel.

- Continuous surveillance of hospital sterilization procedure and removal of any gap if present.
- Proper screening of blood before transfusion and registration of Hepatitis B screening kits and removal of poor quality kits from the market.
- Medical waste legislation and enforcement of proper medical waste disposal to eliminate the recycling of disposable equipment.
- Reduce unnecessary injection practices.
- Community participation, Public private partnership and mobilisation of resources.
- Media (both electronic and print) should play their role in spreading the knowledge promoting hepatitis B disease, its transmission and preventive measures.

REFERENCES

1. www.who.int/campaigns/hepatitis.day/2013/en/index.html 15 Jul 2013.
[Http://www.who.int./media centre/factsheet/BMC public health 2012 fs204 \[12/9/2013\]](http://www.who.int./media centre/factsheet/BMC public health 2012 fs204 [12/9/2013])
[Http://www.who.int/mediacentre/factsheets/fs204/en/index.html](http://www.who.int/mediacentre/factsheets/fs204/en/index.html) updated July 2013
2. The Express Tribune. [Http://tribune.com.ok/story/2195-70/national survey 29 July 2011 \[14/9/2013\]](http://tribune.com.ok/story/2195-70/national survey 29 July 2011 [14/9/2013])
3. Pakistan Medical Research Council, Govt. of Pakistan, Shahrah-e-Jamhuriat, Sector G – 5/2, Islamabad.
Email: pmrc@comsats.net.pk
Website: www.pmrc.gov.pk [15/9/2013]
4. Sheikh N.H., Hasnain S, A. Majrooh, M. Tariq and H. Maqbool Status of Hepatitis B vaccination among the Health care workers of a Tertiary Care Hospital, Lahore. *Biomedica* Jan – June, 2007; Vo. 23: Page No. 17-20.