

Cross Sectional Study Regarding Knowledge Attitude and Practices of patients and their Attendants Regarding Hepatitis-B and Hepatitis-C

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ABSTRACT

Aim: To evaluate the knowledge, attitude and practices of adult patients & their attendants in relation to hepatitis-B and hepatitis C.

Methods: This was an observational, cross-sectional study in which data was collected through a close ended questionnaire from the patients and their attendants presenting in the outpatient department of Shaikh Zayed Hospital, Lahore during the period from June 2016 to July 2016.

Results: 340 responses were collected. 79% of the respondents claimed to know about hepatitis-B & C; however, only 38% had knowledge about the transmission of these diseases and only 37% knew of the preventive measures. Knowledge among the young and middle aged individuals was relatively higher than the elderly. The people belonging to the rich social class had the highest ratio of well-informed individuals as compared to the middle and poor social classes. Similarly, knowledge among the literate proportion was two times higher as compared to the illiterate population. Only 21% of the respondents had received immunization against these diseases.

Conclusion: The proportion of the population having sufficient knowledge and immunization against hepatitis-B & C is very low.

Keywords: Hepatitis-B, Hepatitis-C, Knowledge, Immunization

INTRODUCTION

Hepatitis-B is one of the most common health problems worldwide. It has a wide clinical spectrum which ranges from subclinical, acute symptomatic (including the fulminant variety), carrier and chronic states. Unfortunately, 15- 40% of people who develop chronic hepatitis-B are expected to progress to cirrhosis and end-stage liver disease¹. For this reason, it is necessary for the community to have a basic knowledge of hepatitis-B. Understanding the natural history and prognosis of hepatitis-B is the basis for disease management and for designing better therapeutic strategies².

A multitude of factors determine the natural history of this disease. These include factors related to the host (age, gender and immune status), factors related to the virus (mutations, genotype and level of replication) and exogenous factors such as co-infection with other drugs and pathogens that attack the liver^{3,4}. The causal agent of hepatitis-B is a HBV, a double stranded DNA virus. It is transmitted mainly by parenteral, sexual and vertical routes. 350 to 400 million people in the world are believed to be suffering from this infection, out of which 1 million die annually^{5,6,7,8}.

Hepatitis-C is also one of the most common diseases worldwide. Almost 170 million cases exist at present and 3 to 4 million new cases are reported each year. 350,000 people die from this disease each year⁹. It can manifest as a mild disease lasting for a few weeks. Alternatively, it may take on a chronic, lifelong course in about 85% of the people¹⁰. In such cases, it can progress to liver failure, liver cancer and also esophageal and gastric varices, which have a high tendency to be fatal¹¹. The causal agent of hepatitis C is HCV, a small, enveloped, single-stranded RNA virus. The infection is usually transmitted through drug use, blood transfusions and unsafe medical procedures¹². In 20% of the cases, the mode of transmission remains unknown¹³. Hepatitis C is not spread through breast milk, food or water or by casual contact such as hugging, kissing and sharing food or drinks with an infected person¹⁴.

MATERIAL AND METHODS

This was an observational, cross-sectional study in which data was collected through a close ended questionnaire from the patients and their attendants presenting in the outpatient department of Sh. Zayed Hospital, Lahore during the period from June 2016 to July 2016. A total of 340 patients and their attendants were included in the study. Data was entered and analyzed using SPSS-20. Data was presented in the form of graphs. Descriptive statistics were determined in terms of percentages and frequencies.

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RESULTS

A total of 340 responses were collected from the patients and their attendants appearing in the outpatient department of Shaikh Zayed Hospital during the said study period. The following results were derived from these responses.

Out of the 340 people, 269(79%) claimed to know about hepatitis-B and C (Fig. 1). Only 129(38%) out of the people were found to have satisfactory knowledge of Hepatitis-B and C (Fig. 2). Overall, all age groups were found to have unsatisfactory knowledge about hepatitis-B and C (Fig.3). Only 128(38%) of the respondents were found to have knowledge about the transmission of Hepatitis-B & C. The majority of the population (62%) was unaware in this regard (Fig 4). Similarly, the majority of the population (63%) was found to be unaware about the preventive measures for protection against Hepatitis-B and C (Fig. 5). The rich and the middle classes were seen to possess a better level of awareness regarding hepatitis-B and C. Ignorance was most marked in the people belonging to the lower social classes where more than two-thirds of the total respondents were found to have unsatisfactory knowledge about hepatitis-B and C (Fig. 6). The proportion of people with proper immunization against hepatitis-B and C was found to be extremely low. 268(79%) of the total respondents were not immunized against hepatitis-B and C as shown in figure-7. There was also a marked difference in the level of awareness against hepatitis-B and C between the literate and illiterate population. In our study, 175 respondents were literate whereas the remaining 165 were illiterate. Within the portion of the population that was literate, 89(50.80%) had satisfactory knowledge about Hepatitis-B and C whereas 86(49.20%) had unsatisfactory knowledge about these diseases (Fig. 8). The vast majority of the people (75.59%) had no history of exposure to hepatitis-B and C (Fig.9).

Fig. 1: Frequency of people having knowledge about hepatitis-B and C

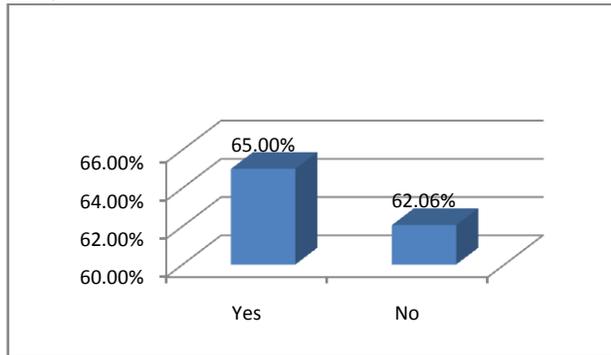


Fig. 2: Frequency of people having satisfactory knowledge about hepatitis-B and C.

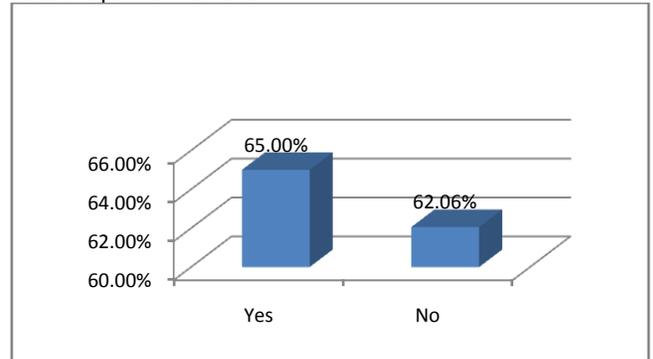


Fig. 3: Frequency distribution of the knowledge about Hepatitis-B and C among different age groups.

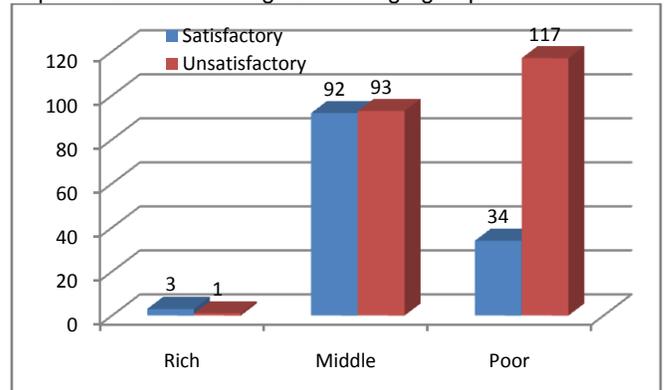


Fig. 4: Frequency distribution of awareness about the transmission of hepatitis-B and C.

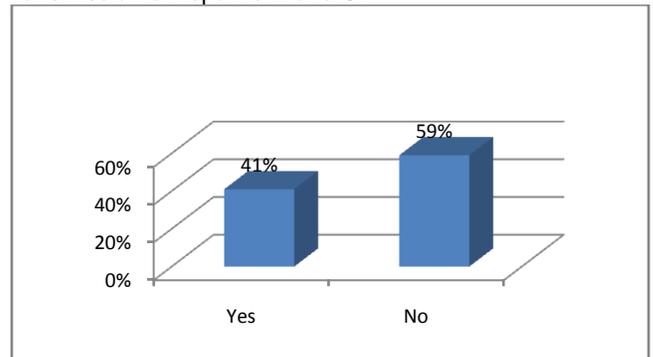


Fig. 5: Knowledge about the prevention of hepatitis-B & C.

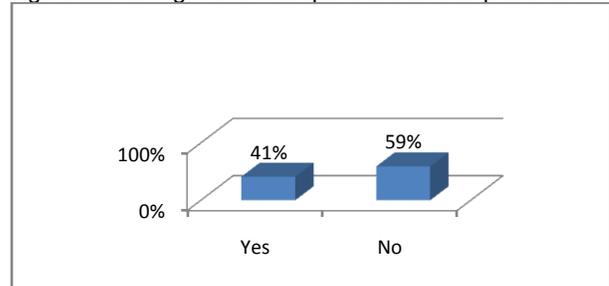


Fig. 6: Frequency distribution of knowledge about hepatitis-B and C among different social classes

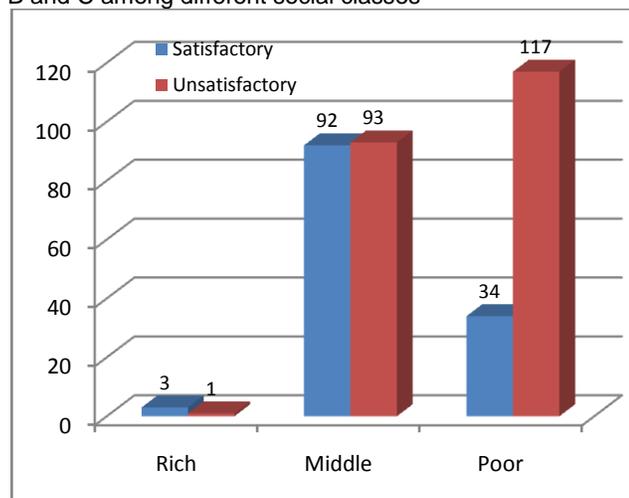


Fig.7: Frequency of immunization against hepatitis-B & C.

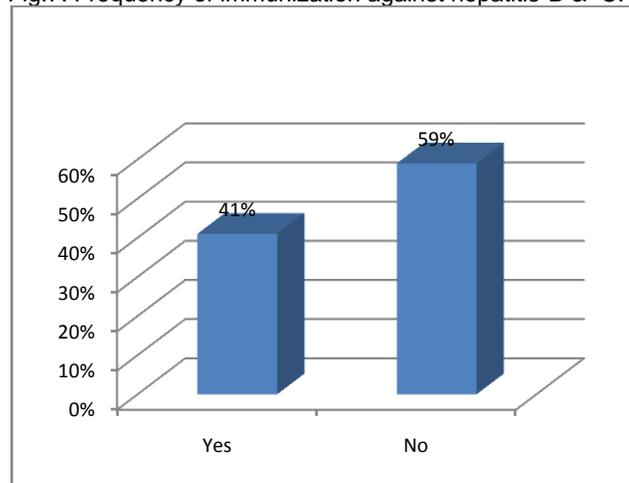


Fig. 8: Frequency of knowledge about hepatitis-B and C among literate and illiterate respectively.

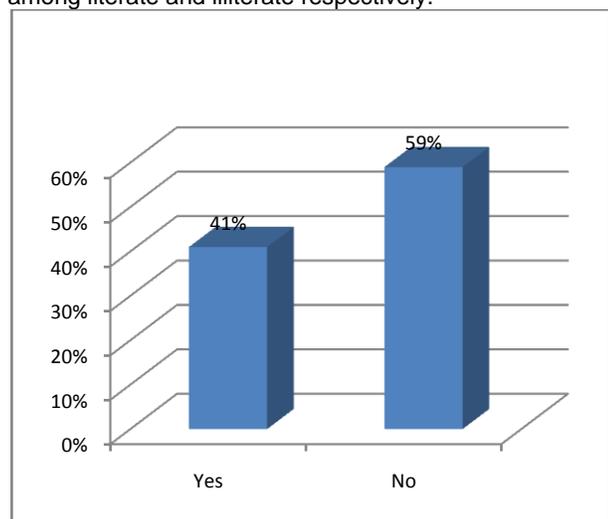
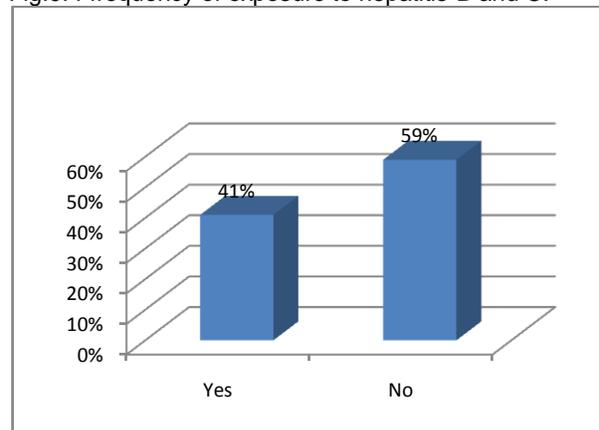


Fig.9: Frequency of exposure to hepatitis-B and C.



DISCUSSION

Hepatitis B and C are very common diseases worldwide. A recent nationwide survey conducted by the Pakistan Medical Research Council on 47043 individuals suggests a carrier rate of 2.5% for hepatitis B and about 5% for hepatitis C¹⁵. In Pakistan, contaminated needle use in medical care, treatment of common ailments by injections and drips, unsterile dental and surgical equipment, drug abuse, unsafe blood and blood product transfusion and reuse of razors by barbers are the major causal factors^{16,17}.

Lack of awareness regarding hepatitis B and C among the general public could be one of the reasons of the high prevalence rate in Pakistan and other developing countries¹⁸. This lack of awareness among the general population is very evident from the results of our study.

According to our study, although 79% of the respondents claimed to know about hepatitis B & C, only 38% out of the people were found to actually possess satisfactory knowledge about these diseases. This suggests that although many people may have heard of HBV and HCV, the community is largely unaware of the serious risks of the infections. These findings support previous studies among other populations^{19,20,21}.

In our study, only 38% and 37% of the respondents were aware about the transmission and prevention (respectively) of hepatitis B & C. These values are quite close to some other studies where only one-third of the respondents knew about the vaccination and transmission for both infections types of hepatitis infection²². On the other hand, compared to some other populations, our results appeared to be a bit higher^{23,24,25}.

It was reported in the present study that greater knowledge of HBV and HCV was associated with higher income and increasing level of education. The

same was reported in other studies where they concluded that the socio-economic level of their participants and level of education had a marked effect on the level of awareness^{26,27,28}. This is expected because a good level of education can provide individuals with better access to information and improved critical thinking skills. Education might matter for health not just because of the specific knowledge one obtained in school, but rather because education improves general skills, including critical thinking skills and decision-making abilities²².

CONCLUSION

Hepatitis B and C are very dangerous and common diseases but most of the people in our community don't have the knowledge about the transmission and prevention of these diseases.

REFERENCES

- Maddrey WC: Hepatitis B: an important public health issue. *J Med Virol* 2000, 61:362-366.
- Lee WM: Hepatitis B virus infection. *N Engl J Med* 1997, 337:1733-1745.
- Lok AS, Heathcote EJ, Hoofnagle JH: Management of hepatitis B: 2000 – summary of a workshop. *Gastroenterology* 2001, 120:1828-1853.
- Lok ASF, McMahon BJ: Chronic hepatitis B. *Hepatology* 2001, 34:1225-1241
- Hoofnagle JH. Hepatitis B management trends: 120:1828-1853
- Ganem D, Prince AM. Hepatitis B virus infection -- natural history and clinical consequences. *N Engl J Med* 2004;350:1118-1129[Erratum, *N Engl J Med* 2004;351:351.]
- Lok AS, McMahon BJ. Chronic hepatitis B. *Hepatology* 2007;45:507-539[Erratum, *Hepatology* 2007;45:1347.]
- Hoofnagle JH, Doo E, Liang TJ, Fleischer R, Lok AS. Management of hepatitis B: summary of a clinical research workshop. *Hepatology* 2007;45:1056-1075
- Gravitz L. (2011). "A smouldering public-health crisis". *Nature* 474 (7350): S2-4. doi:10.1038/474S2a. PMID 21666731.
- Rosen, HR (2011-06-23). "Clinical practice. Chronic hepatitis C infection". *The New England Journal of Medicine* 364 (25): 2429–38.
- Ryan KJ, Ray CG (editors), ed. (2004). *Sherris Medical Microbiology* (4th ed.). McGraw Hill. pp. 551–2. ISBN 0838585299.
- Maheshwari, A; Thuluvath, PJ (February 2010). "Management of acute hepatitis C". *Clinics in liver disease* 14 (1): 169–76; x. doi:10.1016/j.cld.2009.11.007. PMID 20123448.
- Pondé, RA (February 2011). "Hidden hazards of HCV transmission". *Medical microbiology and immunology* 200 (1): 7–11. doi:10.1007/s00430-010-0159-9. PMID 20461405.
- World Health Organization Hepatitis C World Health Organization fact sheet no. 164 on July 2012.
- Qureshi H. Prevalence of Hepatitis B and C in Pakistan-1st Population Based Survey. Proceedings of the 2nd Annual Meeting of Pakistan Society for the Study of Liver Diseases, 2008 Nov, 27-29, Karachi, Pakistan.
- Ali SA, Donahue RM, Qureshi H, Vermund SH. Hepatitis B and hepatitis C in Pakistan: prevalence and risk factors. *Int J Infect Dis* 2009; 13: 9-19.
- Shazi L, Abbas Z, Comparison of risk factors for hepatitis B and C in patients visiting a gastroenterology clinic. *J Coll Physicians Surg Pak* 2006; 16: 739-40.
- Chaudhary IA, Khan, SS, Majrooh MA, Alvi AA. Seroprevalence of hepatitis-B and C among the patients reporting in surgical OPD at Fauji Foundation Hospital, Rawalpindi: Review of 5 year literature. *Pakistan Journal of Medical Sciences* 2007; 23:514-517.
- Minaam Abbas, Muhammad Fawwad Ahmed Hussain, Sajjad Raza, Lubna Shazi: Frequency and awareness of hepatitis B and C in visitors of Hepatitis Awareness Mela. *JPMA* Dec, 2008.
- Thompson MJ, Taylor VM, Yasui Y, Hislop TG, Jackson JC, Kuniyuki A, et al. Hepatitis B knowledge and practices among Chinese Canadian women in Vancouver, British Columbia. *Can J Public Health* 2003; 94: 281-286.
- Ma GX, Shive SE, Fang CY, Feng Z, Parameswaran L, Pham A, et al. Knowledge, attitudes, and behaviors of hepatitis B screening and vaccination and liver cancer risks among Vietnamese Americans. *J Health Care Poor Underserved* 2007; 18: 62-73.
- Ross CE, Mirowsky J. Refining the association between education and health: the effects of quantity, credential, and selectivity. *Demography* 1999; 36: 445-460.
- Ma GX, Shive SE, Fang CY, Feng Z, Parameswaran L, Pham A, et al. Knowledge, attitudes, and behaviors of hepatitis B screening and vaccination and liver cancer risks among Vietnamese Americans. *J Health Care Poor Underserved* 2007; 18: 62-73.
- Wiecha JM. Differences in knowledge of hepatitis B among Vietnamese, African-American, Hispanic, and white adolescents in Worcester, Massachusetts. *Pediatrics* 1999; 104 (5 Pt 2): 1212-1216.
- Taylor VM, Jackson JC, Chan N, Kuniyuki A, Yasui Y. Hepatitis B knowledge and practices among Cambodian American women in Seattle, Washington. *J Community Health* 2002; 27:151-163.
- Nahid Y. Ashri, BDS, MSc. Hepatitis B and C knowledge among Saudi dental patients: *Saudi Medical Journal* December 2008.
- Taylor VM, Tu SP, Woodall E, Acorda E, Chen H, Choe J, et al. Hepatitis B knowledge and practices among Chinese immigrants to the United States. *Asian Pac J Cancer Prev* 2006; 7: 313-317.
- Lin SY, Chang ET, So SK. Why we should routinely screen Asian American adults for hepatitis B: a cross-sectional study of Asians in California. *Hepatology* 2007; 46: 1034-1040.