



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3097802>Available online at: <http://www.iajps.com>

Research Article

**A RESEARCH TO ASSESS THE AWARENESS LEVEL OF
BLOOD DONORS ABOUT HBV & HCV CAUSATIVE AGENTS,
ITS PREVENTION AND TRANSMISSION**¹Dr Tayyaba Sajid, ²Dr Zaineb Talat, ³Dr Mehreen Rasheed¹House Officer, Jinnah Hospital Lahore.

Article Received: March 2019

Accepted: April 2019

Published: May 2019

Abstract:

Background: Hepatitis B, C and (Human Immunodeficiency Virus) HIV viral diseases are not kidding worldwide general medical issues.

Objectives: To survey the information about causative specialists, transmission and aversion of hepatitis B, C and HIV among blood givers.

Patients and Method: This unmistakable investigation was directed at Mayo Hospital, Lahore from November 2017 to April 2018. 500 subjects were incorporated into this investigation, subsequent to taking educated assent. An organized survey was utilized for talking the blood donors.

Result: The mean age of the members was 32.4 ± 4.2 years. Among 500 volunteer blood benefactors, 96.6% were guys and 3.4% females. More individuals have caught wind of HIV (82%) than HCV (74%) and HBV (64%). About portion of the investigation members realized that hepatitis B and C for the most part influence the liver. 62% of people effectively replied about the spread of HIV through dangerous sex. When contrasted with this, 39% and 29% of the people realized that hepatitis B and C individually spread through unsterilized syringes utilized for infusions. Numerous subjects (around 80%) did not realize that every one of these sicknesses is brought about by infections.

Conclusion: Knowledge about hepatitis B, C and HIV contaminations was lacking among study populace.

Keywords: HIV, Hepatitis, Blood Donors.

Corresponding author:**Tayyaba Sajid,**

House Officer, Jinnah Hospital Lahore.

QR code



Please cite this article in press Tayyaba Sajid et al., *A Research to Assess the Awareness Level of Blood Donors about HBV & HCV Causative Agents, Its Prevention And Transmission.*, Indo Am. J. P. Sci, 2019; 06(05).

INTRODUCTION:

Hepatitis B, C and (Human Immunodeficiency Virus) HIV viral diseases are not kidding worldwide general medical issues. Around the world, two billion individuals have been contaminated with the hepatitis B infection (HBV) and in excess of 350 million have interminable, long-lasting infections [1]. An expected 170 million individuals are constantly tainted with hepatitis C infection and 3-4 million individuals are recently tainted each year [2]. At the finish of 2007, there were 33.2 million people living with HIV infection [3]. The National AIDS Program's most recent figures demonstrated that more than 4,000 HIV cases have so far been accounted for since 1986, yet UN and government gauges put the quantity of HIV/AIDS cases around 97,000 going from 46,000 to 210,000. In any case, increasingly sensible evaluations (in light of real observation figures) recommend that this number might be more like 40,000-45,000 [4]. The general commonness of HIV contamination in grown-ups matured 15 to 49 is 0.1% [5]. HIV pandemic develops in three stages. The first stage is a low predominance when commonness of the infection is under 5% in any high hazard gathering of the nation. The second stage is concentrated pestilence when the extent of contaminated individuals in any high hazard assembles rises over 5%. Third and last period of plague is summed up pandemic when the pervasiveness of HIV contamination ascends over 1% among blood contributor or pregnant ladies. Current information proposes that Pakistan has a concentrated scourge among infusion sedate clients in many urban areas and among male sex specialists in a couple of cities [6]. HIV spreads quicker among the individuals who have unprotected sex with numerous accomplices (particularly on the off chance that they have untreated Sexually Transmitted Infections-STIs), who take part in unsafe sexual practices and who share infusing gear (syringes and needles) with other individuals. Effect of irresistible illnesses is most serious among the least fortunate individuals who have restricted or no entrance to wellbeing care [4]. People tainted with one irresistible sickness are increasingly vulnerable to other infections [5]. In northern Pakistan, 3.3% of sound blood benefactors were HBsAg constructive, 4.0% were against HCV constructive and 0.007% were hostile to HIV positive [7].

Hepatitis B, C and HIV diseases spread basically through blood, unprotected sex and perinatal course, Tattooing, selling blood, use of dangerous dental gear, ear and nose penetrating make populace powerless against these contaminations. The danger of transmission increments among people who are

given unsterilized helpful infusions and in patients on haemodialysis [8]. High commonness is found in moderately aged persons [9]. All of these three contaminations which can at last lead to serious deadly sicknesses are preventable. Individuals will receive preventive measures, in the event that they would know about these sicknesses and their genuine outcomes. Just 45 percent of Pakistani teenagers overviewed in 14 areas thought about HIV/AIDS [10]. Prevention is the protection against the plagues of these ailments. The most ideal approach to keep these viral sicknesses is to maintain a strategic distance from the practices that lead to their transmission. Knowing about these maladies can prompt uplifting demeanours and practices, which is basic to keep the spread of these contaminations. Blood gift is a vital piece of society and for the most part, benefactors are determined to have these sicknesses amid screening. We led this investigation to survey the information of blood contributors about these contaminations, particularly with respect to the causative operators, method of transmission and preventive estimates required.

PATIENTS AND METHODS:

This unmistakable investigation was directed at Mayo Hospital, Lahore from November 2017 to April 2018. Five hundred back to back blood benefactors were incorporated. Educated assent was taken from each subject. A pre-planned survey was filled from each examination subject. The survey included statistic profile like member's age, sex and training status. Instruction status was isolated into 5 gatherings: Intermediate or more, Matric, Middle, Primary, and ignorant. The poll contained inquiries with respect to fundamental learning of Hepatitis B, C and HIV contaminations, their causative life forms, their course of transmission, the organ of the body influenced by these infections and the preventive estimates which ought to be received. Members were additionally gotten some information about the source from where they got the data about these diseases.

Information was examined on SPSS. The quantitative information was recorded as mean and standard deviation and subjective information as to rates.

RESULTS:

In this examination, 500 volunteer blood benefactors were met. The mean age of the members was 32.4 + 4.2 years. Lion's share of the members (69%) had a place with urban zones and the rest (31%) had a place with provincial territories.

The greater part of the investigation subjects got data

about these maladies from media (HBV, 68 %; HCV, 68 %; HIV, 58 %). Rest of the subjects got data from wellbeing experts including specialists, hakims and Lady Health Workers (HBV, 18 %; HCV, 17 %; HIV, 17 %) and family or companions (HBV, 14 %; HCV, 14 %; HIV, 6 %). 41% of the examination subjects were not ready to separate Hepatitis B and C as independent illnesses.

Albeit, numerous members had caught wind of these infections, the vast majority of them didn't realize that these were brought about by infections. Just 17% of study subjects realized that Hepatitis B is viral in the source, 21% realized that Hepatitis C is a viral sickness, and 19% realized that HIV is brought about

by an infection. Just 4.4 % realized that HIV influenced the invulnerable framework. Aside from sexual transmission (in the event of HIV), a large portion of the general population did not think about the method of transmission of these infections. Thus, 64 % of individuals realized that protected sex could forestall the transmission of HIV; in any case, information about different strategies for transmission was lacking. With respect to B and C counteractive action, just 37% and 42% examination subjects, separately, knew the utilization of disposables syringes as preventive measures. Also, a low level of study subjects related to great individual cleanliness as a preventive measure for these ailments (12%, 14% and 20% for HBV, HCV and HIV).

Table – I: Demographic profile of study participants (500)

Gender	Number (%)
Male	483(96.6)
Female	17(3.4)
Education status	
Intermediate and above	43(8.6)
Matric	128(25.6)
Middle	139(27.8)
Primary	72(14.4)
Illiterate	118(23.6)

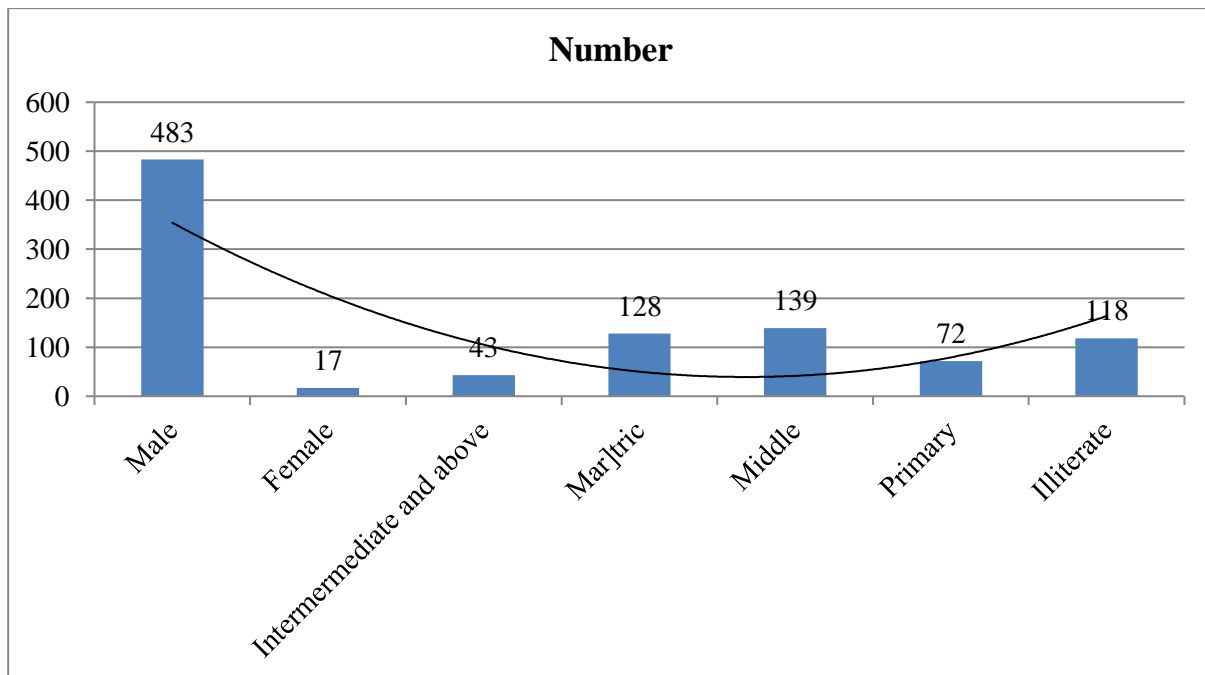
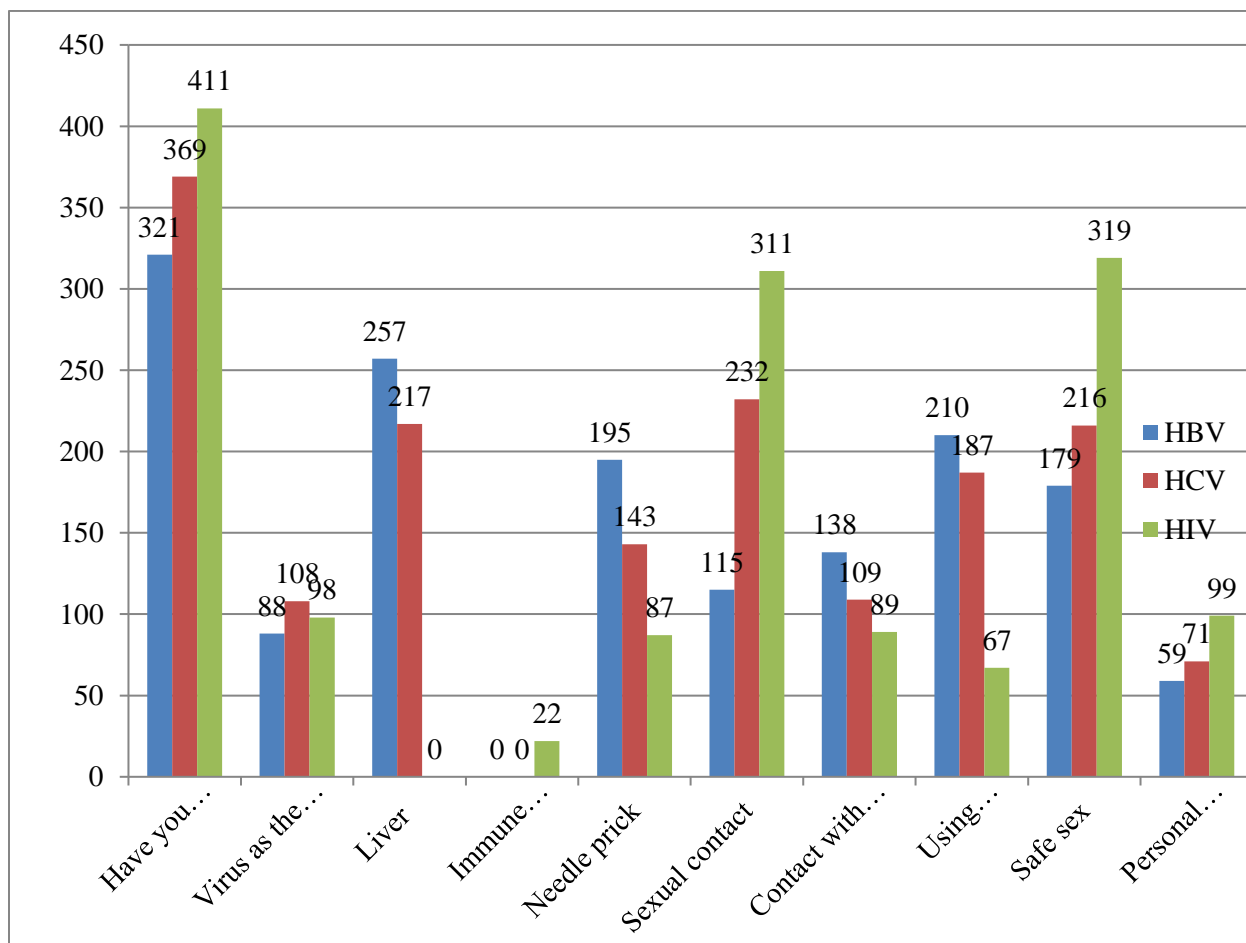


Table – II: Distribution by response to question

Questions	HBV	HCV	HIV
	Number (%)	Number (%)	Number (%)
Have you heard about it?	321(64.2)	369(73.8)	411(82.2)
Virus as the causative organism	88(17.6)	108(21.6)	98(19.6)
Which organ of the body is involved?			
Liver	257(51.4)	217(43.4)	-
Immune system	-	-	22(4.4)
How does it spread?			
Needle prick	195(39)	143(28.6)	87(17.4)
Sexual contact	115(23)	232(46.4)	311(62.2)
Contact with patient	138(27.6)	109(21.8)	89(17.8)
What are the preventive measures?			
Using disposable syringes	210(42.0)	187(37.4)	67(13.4)
Safe sex	179(35.8)	216(43.2)	319(63.8)
Personal hygiene	59(11.8)	71(14.2)	99(19.8)



Albeit numerous members had caught wind of these illnesses (HBV; 64.2%, HCV; 73.8%, HIV; sicknesses (HBV; 64.2%, HCV; 73.8%, HIV; brought about by infections (HBV; 17.6%, HCV; 21.6% HIV; 19.6%), just 4.4 % realized that HIV

influences the safe framework, while, 51% realized that HBV influences the liver when contrasted with 43% who realized that HCV influences the liver. Apart from sexual transmission if there should be an occurrence of HIV, the vast majority of the general

population did not think about the method of transmission of these infections. Essentially, 64 % of individuals realized that sheltered sex could counteract transmission of HIV; generally, information about preventive measures for these ailments likewise was not satisfactory. Generally, more examination subjects' connected safe sex as a preventive measure for HIV (63.8%) when contrasted with HBV (35.8%) and HCV (43.2%). Then again, moderately few investigation subjects related to the utilization of sanitized syringes as a preventive measure for HIV contamination (13.4%) when contrasted with HBV (42%) and HCV (37.4%).

DISCUSSION:

Hepatitis B, C and HIV diseases are rising overall medical issues and in Pakistan, the toll of HBV and HCV patients is expanding step by step. The viable antibody is accessible just against hepatitis B. All the three sicknesses run an endless course causing monetary channel of family assets. Mindfulness about these maladies is important among the overall population for the successful anticipation and control. Our examination demonstrated hole in learning about causative operators, method of transmissions and preventive measures in regards to hepatitis B, C and HIV diseases among blood givers.

Comparative discoveries have been accounted for from different focuses. Among 96 stylists, who have an essential job in the transmission of hepatitis B and C, just 13 % realized that these contaminations influence liver and spread through the perinatal course including razors that they use [11]. From Central Punjab, 31% sound men reacted that hepatitis B and C are viral illnesses which spread through the sharing of needles and syringes (84 %), blood transfusion (70 %) and utilized cutting edges (26 %) [12]. Patients conceded in an open medical clinic have a critical absence of information about hepatitis B and C. Although 96 % recently conceded first-year MBBS understudies realized that hepatitis B is an ailment influencing the liver, however, their insight about the method of spread and preventive measures for this contamination was very poor. Similarly, 61 % of 250 human services labourers knew all methods of transmission of hepatitis B and C. An examination directed in Iran revealed comparable discoveries about learning with respect to the transmission of disease.

Our examination has uncovered comparable discoveries to past investigations that media was the most well-known wellspring of data about these three infections [12]. We likewise discovered that, just few blood benefactors referenced utilization of

dispensable syringes, cleaned instruments and safe sex as measures for aversion of hepatitis B and C. In Pakistan, because of the absence of information, patients demonstrated more prominent interest for infusions notwithstanding for minor side effects, which can be in charge of transmission of Hepatitis B and C [10]. The normal number of infusions per individual every year is 8.5 and 49% of patients get infusions at their first restorative visit. Another investigation from Pakistan, directed in centres of peri-urban zones, demonstrated that 94% of infusions given did not pursue suggested wellbeing convention.

CONCLUSION:

Hepatitis B and C are endemic in many pieces of the creating nations, while HIV is spreading like a pestilence for the most part on account of poor learning about the issue and its aversion. These contaminations are preventable by wellbeing training, for safe sex, safety measure in blood transfusions and the utilization of expendable syringes and razors. In the event that legitimate learning and data about the preventive measures could be given to blood benefactors, they could turn out to be the powerful errand people.

REFERENCES:

1. Khan AJ. Unsafe injections and the transmission of hepatitis B and C in a periurban community in Pakistan. *Bulletin of the World Health Organization* 2000; 78: 956-63.
2. Iqbal F. Prevalence of hepatitis C in patients on maintenance hemodialysis. *Jour Coll Phys Surg P a k.* 2003, 13 (1): 15–8.
3. Bari Risk factors for hepatitis C virus infection in male adults in Rawalpindi-Islamabad, Pakistan. *Tropical medicine and international health* 2001, 6(9):732–8.
4. Kane A. Transmission of hepatitis B, hepatitis C and human immunodeficiency viruses through unsafe injections in the developing world: model-based regional estimates. *Bulletin of the World Health Organization* 1999; 77:801-7.
5. HIV/AIDS.WHO, UNAIDS/07.27E/JC1322E English original, December 2007
6. HIV/AIDS, country profile. Retrieved from http://www.nacp.gov.pk/wpcontent/uploads/2008/02/pakistan_2008_country_progress_report_en.pdf
7. HIV/Aids in Patients Retrieved from; http://en.wikipedia.org/wiki/HIV/AIDS_in_Pakistan.
8. Khattak MF et al. Seroprevalence of hepatitis B, C and HIV in blood donors in northern Pakistan. *J P M A* 2002; 52(9): 398 – 402.
9. Korenromp EL, Williams BG, de Vlas SJ, Gouws E, Gilks CF, Ghys PD, et al. Malaria

- attributable to the HIV-1 epidemic, sub-Saharan Africa. *Emerg Infect Dis* 2005; 11(9).
10. Hepatitis B. Fact sheet No. 204. Geneva, World Health Organization, 2000 retrieved from <http://www.who.int/mediacentre/factsheets/fs204/en/>, accessed 31 May 2004.
 11. Hepatitis C. Fact sheet No. 164. Geneva, World Health Organization, 2000 retrieved from <http://www.who.int/mediacentre/factsheets/fs164/en/>, accessed 31 May 2004.
 12. UNAIDS, World Health Organization. Report on the Global AIDS Epidemic. Available from: www.unaids.org/en/knowledgeCentre/HIVData/GlobalReports/2008_Global_report.asp.