



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

Available online at: <http://www.iajps.com>

Research Article

A CROSS-SECTIONAL RESEARCH TO ASSESS THE REOCCURRENCE RATE OF ANTI-HCV ANTIBODIES AMONG SANITARY STAFF OF THE HOSPITALS

¹Dr Taqwa Tariq, ²Dr Qasim Anwar, ³Dr Samreen Tariq

¹House Officer Jinnah Hospital Lahore, ²Nishtar Medical College, Multan, ³House Officer,
Jinnah Hospital Lahore.

Article Received: March 2019

Accepted: April 2019

Published: May 2019

Abstract:

Objective: To decide the recurrence of hostile to Hepatitis C Virus antibodies in clean labourers and to distinguish extra hazard factors in them for hepatitis C contamination.

Patients and Methods: This cross-sectional research was carried out at Sir Ganga Ram Hospital, Lahore from February to September 2018. Every clean labourer was tried for hostile to HCV antibodies by third era ELISA.

Results: Six percent of the investigation populace was observed to be sure for against HCV antibodies.

Conclusion: The recurrence of against HCV antibodies is genuinely high in sterile labourers, working in this tertiary consideration clinic contemplated. HCV disease is progressively visiting in those sterile labourers who have a longer span of administration.

Keywords: Sanitary workers, Hepatitis C, hepatitis C Antibodies.

Corresponding author:**Dr. Taqwa Tariq,**

House Officer Jinnah Hospital Lahore.

QR code



Please cite this article in press Taqwa Tariq et al., A Cross-Sectional Research to Assess the Reoccurrence Rate of Anti-Hcv Antibodies among Sanitary Staff of the Hospitals., Indo Am. J. P. Sci, 2019; 06(05).

INTRODUCTION:

Hepatitis C Virus (HCV) is a standout amongst the most widely recognized reasons for constant hepatitis, cirrhosis, and hepatocellular carcinoma [1]. Human services labourers (HCWs) are at an expanded danger of obtaining this disease by word related presentation to the sullied sharps which incorporate needles, syringes, lancets, surgical tools and broken glass [2 – 7]. The normal danger of transmission of HCV to human services labourers who support percutaneous introduction to blood from an enemy of HCV antibodies positive patient is 1.8 percent, in spite of the fact that rates as high as 6 to 10 percent have been accounted for [8]. Sharps wounds are a noteworthy wellspring of HCV disease among HCWs, representing practically 40% of HCV contaminations in that gathering, having caused 16,000 diseases worldwide in the year 2000 and assessed to result in 145 passings [7]. The issue is many graves in the growing piece of the world, as in our nation, where the commonness of antibodies to HCV in human services specialists is 20 folds higher than in the created nations [9]. Current proof does not propose an expanded predominance of HCV disease among medicinal services specialists once contrasted and the all-inclusive community [10]. Seroprevalence examines from the western world have noticed that on a normal around one percent of emergency clinic based human services specialists are hostile to HCV positive, a rate not quite the same as the overall public [11]. Similarly, neighbourhood examines did in Pakistan likewise demonstrate that the seroprevalence of HCV disease in HCWs is about 6% [9], generally equivalent to when all is said in the done populace. Anyway, there are considers coming up demonstrating that the seroprevalence of HCV antibodies is sensibly higher in emergency clinic specialists contrasted with general sound populace [12].

Among the medicinal services labourers, it is the clean staff that is most powerless against this disease

since they are the most presented gathering to the sullied sharps and in the meantime, they are the least prepared ones. All inclusive there are just a couple of studies demonstrating the predominance of HCV in sterile labourers and its examination with the other human services specialists or the overall public. In subcontinent and Pakistan, no such investigation has been done till date, which explicitly addresses sterile specialists as a high hazard bunch for procuring HCV because of word related introduction. Point of this examination was to decide the recurrence of hostile to HCV antibodies in clean staff.

PATIENTS AND METHODS:

This cross-sectional research was carried out at Sir Ganga Ram Hospital, Lahore from February to September 2018. Incorporation criteria incorporated a base administration of 03 years and non-heavy drinkers. Known instances of endless liver illness because of causes other than HCV like interminable HBV contamination, Wilson's sickness and Hemochromatosis and so forth, were prohibited from the examination. The subsequent example estimate was one hundred clean specialists, including 69 guys and 31 females. Tests were tried for the subjective assurance of hostile to IgM antibodies to HCV by third Generation ELISA (Enzyme-Linked Immunosorbent Assays) utilizing CDC symptomatic units. Aftereffects of ELISA for each subject were supported in the investigation Proforma.

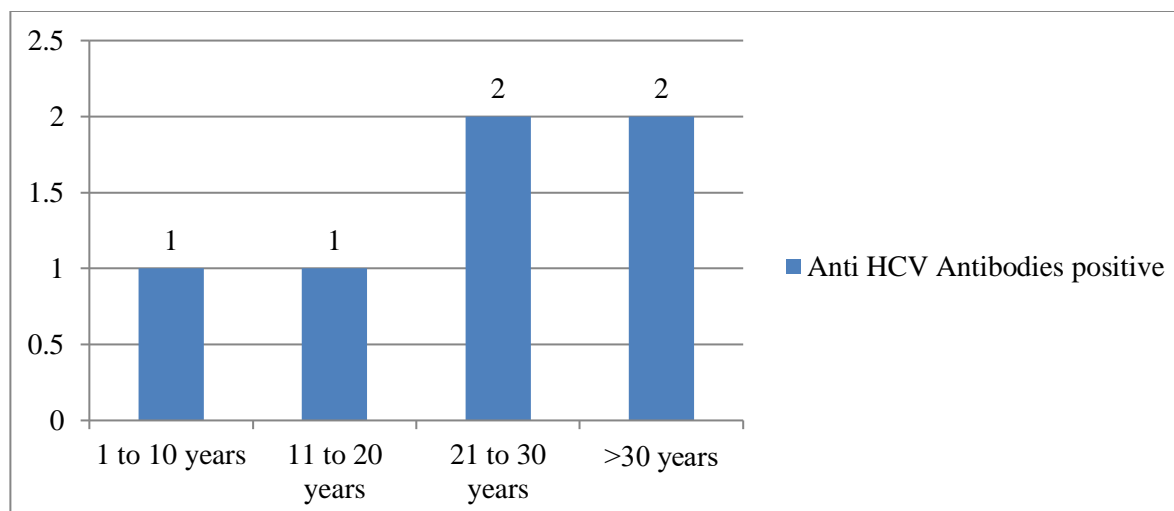
Information was broke down utilizing measurable programming SPSS. Enlightening insights were utilized to depict the information.

RESULTS:

Out of the 100 investigation subjects tried, six were observed to be certain for against HCV antibodies among which 4 were male while 2 were female. Term of administration of positive cases appears in the table.

Table: Description of the duration of service of HCV positive cases (6)

Duration of service	Anti HCV Antibodies positive
1 to 10 years	1
11 to 20 years	1
21 to 30 years	2
>30 years	2



DISCUSSION:

Hepatitis C (HCV) infection contamination is a standout amongst the most imperative reasons for endless liver sickness over the world. Internationally, Hepatitis C infection (HCV) contamination seems, by all accounts, to be endemic in numerous pieces of the world with the pervasiveness of around 3% [4]. In Pakistan, it is assessed that 10 million tainted individuals [13] are contaminated with HCV dependent on a normal sero-pervasiveness of 6% [5]. Anyway, there might be pockets of a lot higher pervasiveness in the nation as other littler examinations have revealed a populace predominance of 16% from Lahore and 23.8% from Gujranwala [14]. Health care specialists are commonly viewed as at a higher danger of securing this contamination. Anyway, the current logical proof does not recommend an expanded pervasiveness of HCV disease among human services labourers, once contrasted and the all-inclusive community. Aziz et al [9] completed an ongoing report at common emergency clinic Karachi to decide the commonness of different blood-borne viral diseases incorporating HCV in medicinal services labourers. It demonstrated that the commonness of antibodies to HCV in Health Care Workers (HCWs) was 5.6%. Thus, Khurram et al. done another cross-sectional, observational investigation in open part emergency clinics. It demonstrated that the Seroprevalence of hostile to HCV antibodies in medicinal services specialists is 6% [15]. Both these neighbourhood thinks about demonstrated that the normal pervasiveness of HCV contamination in the medicinal services labourers was from 5.6 to 6 %, same as when all is said in done Pakistani populace, for example, 6% [5]. This neighborhood information is in accordance with the global research which demonstrates that the predominance of HCV in HCWs is equivalent to as a

rule populace [10]. A European report conveyed in Denmark in 2004 demonstrated that HCWs are not at an expanded danger of obtaining blood borne contaminations including HCV as a result of their presentation to the tainted patients [10]. While this was a dialog pretty much all HCWs, next to no work has been done to think about clinic sterile staff as a particular populace among HCWs. In 1991, Jaqueti et al. done a model report at Madrid, Spain to decide the commonness of HCV in various gatherings of emergency clinic staff including the clean specialists [16]. They found that the pervasiveness of against HCV antibodies was 1.7% in the clinic staff. There were no huge contrasts in the sterile laborers and the non-clean specialists of medical clinic staff [16]. In Pakistan, no investigation has yet been finished concentrating explicitly on the commonness of HCV in emergency clinic sterile laborers. Our investigation demonstrated that the recurrence of HCV in sterile laborers as controlled by the positive enemy of HCV antibodies is 6%. This is about equivalent to when all is said in done Pakistani populace as dictated by the biggest populace based examination completed by Luby et al [5] in Hyderabad. It was likewise like the pervasiveness of HCV in the general social insurance laborers in various Pakistani medical clinics as controlled by Aziz et al. [10] in Karachi and Khurram et al. [16]. Our investigation also depicts that sterile specialists with a longer term of administration have more opportunities to be sure for Anti HCV antibodies. This was likely because of more introductions to the tainted sharps with a longer length of administration. This means presumably procuring the disease is identified with the danger of defiled sharp wounds. Anyway, bigger investigations are required to portray the accurate factual relationship between the length of administration and the nearness of HCV disease.

CONCLUSION:

In spite of the fact that recurrence of hostile to HCV antibodies is as high in clean labourers as a rule populace, however, those with longer length of administration have all the earmarks of being an expanded danger of creating against HCV antibodies, most likely in view of progressively word related presentation to the HCV defiled sharps. We consider, bigger examinations are hard to know the precise pervasiveness of HCV disease in social insurance labourers.

REFERENCES:

- Centres for Disease Control and Prevention. Risk of acquiring hepatitis C for health care workers and recommendations for prophylaxis and follow-up after occupational exposure. Hepatitis Surveillance Report No. 56, Atlanta 1995.
- Nadeem M, Yousaf MA, Mansoor S, Khan FA, Zakaria M, Ali N. Seroprevalence of HBsAg and HCV antibodies in hospital workers compared to aged-matched healthy blood donors. *Pak J Pathol.* 2004; 15:17-20.
- Hamid S, Umar M, Alam A, Siddiqui A, Qureshi H, Butt J, et al. PSG consensus statement on the management of hepatitis C virus infection- 2003. *J Pak Med Assoc.* 2004; 54: 146-50.
- Aslam M, Aslam J. Seroprevalence of the antibody to hepatitis C in selective groups in the Punjab region of Pakistan. *J Clin Gastroenterol.* 2001; 33: 407-11.
- Khurram M, Hasan Z, Butt A, Faheem M. Prevalence of anti-HCV antibodies among health care workers. *Med J* 2003; 28(1):7-11.
- Jaqueti J, Navarro-Gallar F, Martínez-Hernández D, Nicolás D, Hernández-García R, Piqueras JP. Prevalence of antibodies against the hepatitis C virus among the staff of a general hospital. *Rev Esp Enferm Dig.* 1991; 80(1):33-4.
- Khan AA, Rehman K, Haider Z, Shafqat F. Zero markers of hepatitis B and C in Pakistan with cirrhosis. *J Coll Physicians and Surg Pak.* 2002; 12: 105-7.
- Pruss-Ustün A, Rapiti E, Hutin Y. Estimation of the global burden of disease attributable to contaminated sharps injuries among health-care workers. *Am J Ind Med.* 2005; 48: 482-90.
- Available from: http://www.who.int/entity/quantifying_ehimpacts/global/7sharps.pdf
- Puro V, Petrosillo N, Ippolito G. Italian Study Group on Occupational Risk of HIV and Other Bloodborne Infections. Risk of hepatitis C seroconversion after occupational exposures in health care workers. *Am J Infect Control.* 1995; 23:273-7.
- Aziz S, Memon A, Tilly HI, Rasheed K, Jehangir K, Quraishy MS. Prevalence of HIV, Hepatitis B and C amongst Health Workers of Civil Hospital Karachi. *J Pak Med Assoc.* 2002; 52:92-4.
- Fisker N, Mygind LH, Krarup HB, Licht D, Georgsen J, Christensen PB. Bloodborne viral infections among Danish health care workers – frequent blood exposure but low prevalence of infection. *Eur J Epidemiol.* 2004; 19:61-67.
- Dienstag JL, Isselbacher KJ. Chronic Hepatitis. In: Kasper DL, Braunwald E, Fauci AS, Hauser SL, Longo DL, Jameson JL, editors. *Harrison's Principles of Internal Medicine.* 16th ed. New York: McGraw-Hill; 2005. 1844-55.
- Sherman M. Chronic hepatitis C and screening for hepatocellular carcinoma. *Clin Liver Dis.* 2006; 10: 735-52.
- Thorburn D, Dundas D, McCrudden EAB, Cameron SO, Goldberg DJ, Symington IS, et al. A study of hepatitis C prevalence in healthcare workers in the West of Scotland. *Gut.* 2001; 48:116-20.
- Anand BS, Velez M. Assessment of correlation between serum titers of hepatitis c virus and severity of the liver disease. *World J Gastroenterol.* 2004; 10: 2409-11.
- Luby SP, Qamruddin K, Shah AA, Omair A, Pasha O, Khan AJ, et al. The relationship between therapeutic injections and high prevalence of hepatitis C infection in Hafizabad, Pakistan. *Epidemiol Infect.* 1997; 119: 349-56.