Review

The most dangerous and communicable diseases of the world

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The true fact is that HBV, HCV and HIV is spreading because of lack of knowledge denial ignorance and poor access of health facilities in Pakistan. So this paper is to acknowledge causes people about these dangerous diseases and to spread knowledge for the prevention of these diseases.

Key words: dangerous, communicable, disease.

INTRODUCTION

Epidemics of blood-borne pathogens have plagued the entire developing world. Such diseases impose heavy burdens on national economies and individual families due to costs arising from acute and chronic morbidity and mortality. Globally, 2 billion people are infected with the hepatitis B virus (HBV), of which more than 350 million have chronic infections. An estimated 170 million persons are chronically infected with hepatitis C virus (HCV) and 3 to 4 million persons are newly infected each year. Although no recent population-based estimates for the prevalence of HBV and HCV are available in Pakistan, a previous study done at Hafizabad and studies on blood donors suggest that the prevalence of both diseases ranged from 210%.

HIV is the human immunodeficiency virus. Spread the presence of other sexually transmitted diseases or multiple sex partners. Sharing needles, syringes, rinse water, or other equipment used to prepare illicit drugs for injection. You can prevent from HIV get medical care, treatment, and supportive services to help you stay healthy.

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus. It is a major global health problem. It can cause chronic liver disease and chronic infection and puts people at high risk of death from cirrhosis of the liver and liver cancer. The virus is transmitted through contact with the blood or other body fluids of an infected person. About 6,00,000 people die every year due to the consequences of hepatitis B. It is an important occupational hazard for health workers and preventable with the currently available safe and effective vaccine.

HCV is an RNA virus with great molecular heterogeneity within and across people, because mutations occur frequently during replication. Viral diversity is one of the challenges to vaccine development; others include the lack of a non-primate animal model and the unclear immune responses that lead to viral clearance. There are six major genotypes of HCV that vary according to geographical distribution; most isolates (about 85 percent) in the United States are genotype 1a or 1b.

Hepatitis C virus (HCV) infection is a major public health problem, with an estimated global prevalence of 3% occurring in about 170 million persons worldwide.

Hepatocellular carcinoma (HCC) is the most common primary liver tumor, and represents the third leading cause of cancer death worldwide. It is the fifth most common cancer in men and seventh in women, accounting for 7% of all cancers. Hepatocellular carcinoma (HCC) is a leading cause of cancer-related mortality worldwide, with the majority of cases associated with persistent infection from hepatitis B virus (HBV) or hepatitis C virus (HCV). Natural history studies have identified risk factors associated with HCC development among chronic HBV and HCV infection.

Prof. Sarwar J. Zuberi said that among health workers,

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18% of dentists, 17% of laboratory technicians, a percentage of doctors and 7% of nurses were HBV positive. The professor also informed that about three and a half percent of blood donors, 6.7% of pregnant women, 1.1% of children and 34% of chronic liver disease patients had HCV.

Dr. Jaffar Naqvi said that 170 million people suffered from HBV and HCV worldwide. Prevalence of HBV in general population was 7.5% and HCV 10%. HBV infection during childhood can cause acute fulminate or chronic Hepatitis, liver cirrhosis and liver cancer.

Approximately 2 million people in world are HBV infected and 400 million chronic carriers. Lack of proper health facilities, poor economical status and less public awareness of transmission of HBV, HCV and HIV is leading to increased HBV infection rate in Pakistan (Alam et al., 2007). An experiment was conducted on some IDU, who were analyzed for Hepatitis B genotype with serological assay to detect HBsAg. 22.4% subjects were found to be positive HBsAg. Authors found that maturity of intravenous drug abusers were genotype D infected with prevalence rate of 62.5%. 8.92% IDU were positive for genotype A whole 28.59% IDU were positive for mixed A & D. The writer declared that major risk factor for transmission of blood borne infection like HBV. It concluded that development of public health care policies with special emphasis on HBV transmission control is urgently needed especially for IVDA.

Idrees et al. (2009), found that HCV and HBV needs to Hepatocellular Carcinoma. He declared that epidemiologic survey had identified 10 to 80% of HCC patient were HCV infected.

By serological study’s, Sultan et al. (2006) revealed that frequency of HBV among blood donors in approximately 1.46-2.99%. HBC is 3.01-4.99%, HCV ranges from 0-0.06% and for syphilis they found it 0.19-0.57%. They also related that seroprevalence of young replacement donors was low as compare to holder replacement donor. They concluded that frequency of HBV is declining gradually in Pakistan. However HCV frequency in Pakistan is highest in the region. He further included that replacement donors had higher frequency as compared to volunteer donors. Syphilis frequency in Pakistan is same as India but HIV is less common in Pakistan.

In Pakistan, heterosexual transmission of HIV/AIDS accounts for the (majority) 37% of reported cases. Next in frequency are of contaminated blood or blood products 18% followed by injecting drug user, 4% homosexual or bisexual sex, 6% mother to child transmission and 1.3% with 35% unknown. In 1993, first recognized transmission of HIV through breast-feeding was reported in Pakistan (Khan et al., 2007). Mother to child transmission of HIV has created more challenges to the clinician’s health planners.

Ahmed et al. (2003) conducted a survey in 3 Pakistani cities Quetta, Peshawar and Rawalpindi among drug users. He found that majority used heroine (98.7 %), mostly by inhalation (15.2%) by injected drugs. Only 41% had heard about AIDS/HIV and 30% were paid blood donors. They revealed needle sharing and injection drug users were highest in data.

Janjua et al. (2006) Conducted Cross-sectional Survey of Barber’s Shop in Rawalpindi and Islamabad, which revealed only 13% of barbers, declared that they had heard about Hepatitis as liver disease, only 11.4% razors were cleaned and antiseptic, and 46% reuse for shaves. He also declared that 90% participants heard AIDS and labeled it as fatal disease and only 67% know about its mode of transmissions. They found that 75% got awareness from television while 42% read about it in newspaper.

Bhatti et al., (n.d.), conducted a study on some thalassemics major transfusion dependent patient. He found that 60% cases were anti-HCV positive and have high level of ALT (Alanine Transfase). According to them, increasing level of ALT indicates chances of acute viremia. They conducted that to prevent HCV transmission immediately prompt measures are required. Approximately 90% of liver damage is usually mild during childhood. The annual zero conversion rate of Hepatitis and surface antigen was very low 0.56% of infection. Maternal Hepatitis B antigen status, host immune status and possibly the HBV are the manufactures determine the course of HBV infection in childhood. Like the Hepatitis B virus AIDS virus from the mother to the infant has been reported. A small head recognizes babies born with AIDS, box like forehead, flattened nose bridge and wide set eyes. Some infants show up symptoms within six months.

Bianco et al. (2013) conducted cross sectional survey among nurse in Clabia (Italy) to estimate level of knowledge, attitude and frequency evidence based practice that can lead to prevention of HCV transmission in Hepatitis. They also estimated that behavioral changes at abandoning out dated practices and adoption and maintenance of evidence based practices can reduce transmitting of evidence HCV and HBV among health care workers.

According to Kleven et al. (2013), Hepatitis C virus was identified in late 1980s as Non A or Non B Hepatitis virus. According to their estimation, 3.2 million people are affected by HCV but most of them are asymptomatic. Health care setting and HCV transmission can be prevented by following standard precaution. In order to access information about infection controls and new tools are available. HCV is a RNA virus which undergoes frequent mutation during replication HCV diversity is one of the challenge for vaccine formation. There are six major genotype of HCV are present from which 85% USA is affected by 1a or 1b.
DISCUSSION AND CONCLUSION

Here, some symptoms, infections and prevention of the diseases for your knowledge are discussed. Common Symptoms of these diseases are Fever, Weight loss, Fatigue night sweatiness, Diarrhea and Fatigue. Infection causes through Oral or vaginal candidiasis, Hairy leukoplakia, Shingles, Pneumonia and Neuropathy. By these preventions, we will reduce the chances of spreading pathogens of these dangerous diseases. It includes: Sterilization of syringes, avoid sharing razors or toothbrushes, avoid reuse of syringes, avoid unnecessary injections, avoid excess amount of painkillers and antibiotics, be careful in sexual relation and oral kissing and avoid sharing hypodermic needles or syringes. There is need for more co-operation, UN assistance, community involvement, awareness of women in child bearing age about HIV/AIDS and further is in order to reduce HIV transmission through breastfeeding. HBV, HCV and HIV spread by transmission of blood so use screened blood whenever needed. We can get more knowledge about importance of blood testing. We must have tried to habituate of blood testing of blood disease. If you like to take responsibilities of your health and your family’s health so please come with us to fight with communicable and dangerous diseases with the help of these simple preventions.

REFERENCES


