

Bacterial and Rare Diseases 2019: Blood borne viruses (BBVs)- Wafaa Ahmed Zahran- Menoufia University

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Blood borne viruses (BBVs) are viral infections that can be transmitted from person to person through blood or body fluids. The BBV infection is a major global health problem, posing great risk to both healthcare workers and patients in their care. In health care settings, Healthcare workers (HCW) may acquire blood borne infections from lacerations, punctures, and non-intact skin exposures to the blood or body fluids of infected patients. Exposures may occur during surgical or invasive medical/dental procedures. Transmission of BBV infection to patients may occur by injection, infusion, transplantation, unsterile equipment, or other accidental injury/penetration So, the workshop will concentrate on the BBVs that could be transmitted in the healthcare settings; HBV, HCV and HIV: for each of these viruses, there will be clarification of their characteristics, worldwide epidemiology, modes of transmission, clinical significance, laboratory diagnoses, and updates of treatments. In this part, PowerPoint presentation together with interaction with the audience in the form of think, pair and share activity about simple basic knowledge in relevance to these BBVs. In the second part, there will be discussion about risk of transmission between patients and healthcare workers, Factors influencing the occupational risk with elaboration of different conditions/ situations for transmission; how to get Risk Reduction of transmission to Healthcare Workers and Risk Reduction of transmission to Patients; with review of Infection control measures for prevention of transmission of Blood borne Viruses in Healthcare Settings: standard precautions, safe sharps disposal, safe injections, decontamination and healthcare workers vaccination. Discussion would elaborate the Updated Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post exposure Prophylaxis. Animation and short videos will be used to elucidate the PowerPoint presentation of this part. Third part will be in the form of interactive groups discussion about some presented case scenarios, showing different clinical presentations and select and explain best management modalities to ensure deep understanding and optimum knowledge retention.

Blood Borne Viruses that may be carried by some people's blood which may cause severe disease in certain people and in others there will be no symptoms. The Hepatitis B, C and D viruses which cause the liver diseases hepatitis. Human Immunodeficiency Virus (HIV) which causes AIDS (Acquired Immune Deficiency Syndrome) which affects the immune

system of the body. We need to prevent the infection by following all the necessary precautions. It will be caused by one person to another person through blood to blood. Big risks is injecting with drugs. HIV and hepatitis B can also be sexually transmitted who comes contact with bodily fluids from other humans are at risk of BBV. This involves in sharp or abrasive implements that may break the skin (needle stick injuries). Moreover it will be transferred by used Needles or by sharp objects. Blood Borne Virus finds in: Breast milk, Sexual Fluids like Vagina, Penis or anus. These Virus May feel well for Many years before the Virus effects the health, but they can still spreads (Pass) Virus to the another people. To avoid this blood borne Virus the people always need to use condoms, dams or lubricant when having the sexual contact. The Blood Borne also occurs by using same toothbrushes, razors and Personal hygiene items.

Different blood borne viruses affect your body in different ways:

Hepatitis B, which can cause liver damage and liver cancer;
Hepatitis C, which can cause liver damage and liver cancer
HIV, which can make your immune system weak to other infections; The People who are infected with a BBV may show little or no symptoms of serious disease, but other infected people may be severely ill. You can become an infected with a virus whether that person who infects you appears to be ill or not. Indeed, they may be unaware are they are ill as some persistent viral infections which they do not cause symptoms. The infected person can transmit through blood-borne viruses from one person to another by various routes and over a prolonged time period.

National and local guidance:

Preventing the spread of blood-borne viruses (BBVs) is a key of public health, and a key to outcome in the Drug Strategy
Hepatitis C: guidance, data analysis and provides the information on the characteristics, diagnosis, management and epidemiology of hepatitis C (Hep C, HCV).
Hepatitis B: guidance, data analysis provides the information on the characteristics, diagnosis, management and epidemiology of hepatitis B.

Prevention:

Ensuring that people who use drugs do not contract BBVs is one way of keeping them and their communities' safe before and during their recovery journeys. The Preventing BBV

transmission also has benefits for a wider society, both in terms of reducing the health harms and treatment costs. The effective local action is to prevent BBVs which include a wide range of services.