

Rise of Blood Borne Infections in Pakistan: Is it a Call for Action?

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Abstract

Health care workers are exposed to a number of occupational hazards including injury from needle stick, which puts workers at risk of transmission of as many as 30 pathogens, of which the most life-threatening are the Hepatitis B virus (HBV), Hepatitis C virus (HCV), and the Human Immunodeficiency Virus (HIV). This letter focuses on various factors in the health sector of developing countries that have led to an increase prevalence of HBV, HCV and HIV in health care workers. A thorough literature review was performed to identify factors contributing to an increased prevalence of blood borne infections among health care workers in developing countries including Pakistan. Majority of the health care workers are at increased risk of acquiring blood borne infections due to needle stick injuries. The two most important risk factors for needle stick injuries include lack of precautions in needle handling by health care workers and defective or absent screening and vaccination protocols within health employees. Therefore, special preventative measure should be taken to minimize transmission risk of HBV, HCV and HIV in health care workers especially in the developing countries where occupational hazards such as needle stick injury is a major contributing factor in transmission of these blood borne infections.

Keywords: Health care workers; Needle stick injuries; HBV; HCV; HIV

Editorial

Health care workers are exposed to a number of occupational hazards including injury from needle stick, which puts workers at risk of transmission of as many as 30 pathogens, of which the most life-threatening are the hepatitis B virus (HBV), hepatitis C virus (HCV), and the human immunodeficiency virus (HIV). According to a study, the prevalence of Hepatitis B virus in Healthcare workers is 2.18%. [1]

This letter focuses on the various factors in the health sectors of developing countries that have led to an increase prevalence of HBV, HCV and HIV in health care workers.

The two most important risk factors for needle stick injuries include lack of precautions in needle handling by health care workers and defective or absent screening and vaccination protocols within health employees [2].

According to guidelines of Centers for Disease Control and Prevention, preoccupation screening and vaccination, administration of the vaccine against HBV is required for all healthcare workers. This is however not followed strictly in the developing countries [3]. Consequently, for instance, Pakistan faces a very high rate of needle stick injuries each year, most of which remain unreported [1].

Despite the fact that nurses are at greater risk of transmission via needle stick injuries as compared to others, a study conducted in Karachi, Pakistan concluded that most nurses lack the basic knowledge regarding the health risk associated with needle stick injuries and importance of post exposure prophylaxis [4].

Recently the government of Pakistan conducted an HIV screening campaign in one of the districts of Sindh Province. According to which, nearly 400 out of 1548 screened individuals were seropositive

for HIV. With 71.9% of the seropositive individuals being children, these figures call for rapid assessment and implementation of guidelines during health care practices that will ensure the decrease in risk of transmission of these pathogens [5]. Although HIV and HBV are preventable diseases but lack of knowledge, high cost of screening tests and limited funding by the government towards the occupational expenses of workers, increases the importance of needle administration protocols in healthcare settings of developing countries.

In conclusion, special preventative measure should be taken to minimize transmission risk of HBV, HCV and HIV in health care workers. These measures include educating health care workers about routes of transmission of HBV, HCV and HIV; improving vaccination coverage; educating high-risk workers on appropriate post exposure prophylaxis practices; hand washing; use of personal protective equipment and proper disposal of the waste.

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