Prevalence and Factors Associated with Percutaneous Injuries and Splash Exposures among Health-Care Workers in Rift Valley Provincial and War Memorial Hospitals, Kenya

Everline Muhonja Mbaisi

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ABSTRACT

Accidental occupational exposure of healthcare workers to blood and body fluids after skin injury or mucous contact constitutes a risk for transmission of blood-borne pathogens. Such pathogens include Hepatitis B virus (HBV), Hepatitis C virus (HCV) or Human Immunodeficiency Virus (HIV). A study was conducted to determine the prevalence and associated factors for percutaneous injuries and splash exposure among healthcare workers in Rift Valley provincial and War Memorial hospitals. The study design was cross-sectional conducted from October to December 2010. Self reported incidents and circumstances surrounding occupational exposure were sought by use of interviewer administered semi-structured questionnaire. An audit was conducted to assess occupational exposure prevention programs. Twenty four percent of healthcare workers (n=348) reported having been exposed to blood and body fluids in the preceding 12 months. In RVPGH, percutaneous injuries were reported by 19% (n=305) and splash to mucous membrane by 7%, with 11% reporting multiple exposures. Higher rates of percutaneous injuries were observed among nurses (50%), during stitching (30%), and in obstetric department (25%). Forty eight percent (n=83) reported the incidents with 20% (n=83) taking PEP against HIV. Health workers aged below 40 years were more likely to experience percutaneous injuries (OR= 3.7; P-value=0.034) while previous training in infection prevention was protective (OR= 0.52; P-value=0.029). The facilities lacked an occupational risk control plan. Percutaneous injuries and splashes are common in Rift Valley and War Memorial hospitals. Preventive measures remain inadequate. Post-exposure management is poorly adhered to with gross underreporting. Health institutions should have policies, institute surveillance for occupational risks and enhance training of health care workers.