Alice Njihia, J Infect Dis Ther 2017, 5:7(Suppl)
DOI: 10.4172/2332-0877-C1-035



# Prevalence and response to needle stick injuries among health care workers at Kenyatta National Hospital Nairobi, Kenya

**Alice Njihia**
Kenyatta National Referral and Teaching Hospital, Kenya

**Introduction:** Needle stick injuries (NSI) are preventable global occupational hazards which are quite prevalent among Health Care Workers (HCW) who are pillars of Health Care Systems. The NSI can easily result to blood borne infections such as hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). The infections have bad outcomes to the HCW such as long term illness, disability and even death. Health care workers optimal health is essential for efficient delivery of health services

**Objectives:** To determine the prevalence and response to NSI among Health Care Workers working at Kenyatta National Hospital.

**Methodology:** The overall objective of this study was to determine the prevalence and response to needle stick injuries among HCW working at KNH. The study design was cross-sectional descriptive while data was collected by quantitative and qualitative methods. The study population was 1394 HCW who performed invasive patient procedures from where a sample of 331 was determined. Data was collected for a period of one month by self-administered structured questionnaires and was analysed by SPSS version 20.0. Chi Square was used to test association and relationship between independent and dependent variables. The findings were presented in frequencies, proportions, pie charts, tables and graphs. The expected benefits of the study findings were to identify gaps in prevalence and response to NSI.

**Results:** The results showed that 151(45.6%) respondents experienced NSI in their entire career while 62 (41.1%) experienced NSI in the last one year. The incidence rate was 2 NSI per HCW per year. Majority of the HCW got one NSI in both life time 78(51.7%) while in the last one year was 52(83.9%) respectively. Gender, education, profession and experience respectively were statistically associated with lifetime history of NSI, ($\chi2=4.057$, df=1, $p<0.05$), ($\chi2=12.911$, df=5, $P<0.05$), ($\chi2=8.404$, df =3, $p<0.05$), ($\chi2=16.819$, df=4, $P<0.05$). Majority 324(97.9%) of the respondents disposed sharps sharp in appropriate sharp bins. Administration of injections was a day to day activity by the majority 91.5% of the HCW of which 20(13.2%) of them got NSI. Majority of HCW (45.7%) got NSI while on night duty. There was statistical significant association between work experience and drawing blood samples, suturing and recapping used needles, ($\chi2=11.953$, df=4, $p<0.05$),), (c2=13.693, df=4, $p<0.05$ and c2=14.069, df=4, $p<0.05$) respectively. Age was also related to drawing blood samples (c2=15.535, df=3, $p<0.05$). Majority of HCW 98 (65.1%) washed NSI site with water and soap, while only 50% of the HCW reported all NSI. screening for Hepatitis B and HIV was 36 (58.1%) and 7(11.3%) respectively. Uptake of PEP for HBV was 12 (7.9%) while for HIV was 70(46.4%). Gloves were worn routinely as precautions against NSI by 201(62.6%) of the respondents

**Conclusion & Recommendations:** The prevalence of NSI was found to be high among HCW at KNH; major activity at time of NSI was administration of injections with low uptake of PEP. Proper handling of needles should also be considered for the staff giving treatment via injections. More research needs to be done on prevalence, response and contributing factors to NSI for informed policy formulation and ways of addressing the gaps.

## Biography

Alice Njihia working as a Senior Assistant Chief Nurse in Internal Medicine department in Kenyatta National Referral and Teaching Hospital, Kenya, and have published many articles based on Infection Prevention and Control methods and also worked as Assistant Chief Nurse in Accident and Emergency Department

awnjihia@gmail.com