ABSTRACT

A retrospective cohort study was conducted to determine the annual Incidence rate of sharp stick injury and its determinants among hospital nurses, in Ratchaburi Regional hospital, Thailand, during 1999. Two hundred and fifty nurses were included in the study. A set of self-administered questionnaire was used to collect data on incidence of sharp stick injury, employee’s profile, work characteristics, activities and conditions related to sharp stick injury and preventive behavior factors.

The annual person incidence rate of sharp stick injury was 50.8/100 persons/year and the episode incidence rate was 125 episodes / 100 persons / year. Administering injections, recapping needles, taking blood specimens, cleaning of the used equipment, caring of patient in an emergency situation, breaking ampoules and working with co-workers were the primary activities causing sharp stick injury. Injection needles and broken glass were responsible for 96 percent of all cases. Patient rooms and treatment rooms accounted for 79 percent of sharp stick injury. Fingertips were the most injured part of the body (96%). The rate of under reporting sharp stick injury was 62 percent.

It was found that 14 factors were associated with sharp stick injury but after controlling all variables by using Multiple Logistic Regression, only 5 factors remained significant. They were: illness presented (adjusted RR=2.3, 95%CI=1.3-2.4); inadequate syringes and needles (adjusted RR=1.5, 95%CI=1.2-2.2); low work environment satisfaction (adjusted RR=1.4, 95%CI=1.2-2.0); do not plan ahead to avoid sharp stick injury (adjusted RR=1.4, 95%CI=1.1-2.6); and do not report injury to the supervisors (adjusted RR=1.4, 95%CI=1.2-1.9).

The researcher recommended that employers should ensure proper training in the safe use and disposal of needles and sharp objects, promote awareness among health care workers and to consolidate the report system, as well as, to monitor the effect of sharp stick injury.