

Abstract: Injection Safety in Nepal

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In Nepal, untreated medical waste is a recognized hazard to hospital staff, patients and the community. Unsafe injection practice and improper sharp management is a major problem in Nepal. Many health care workers like medical doctors, nurses, supporting staff are at high risk for occupational exposure to blood-borne pathogens through needle stick injuries. Many of the injuries are unreported. Prevalence of needle stick injury in health care industry is still unknown in Nepal. No comprehensive research on this was carried out yet

HECAF has conducted a questionnaire survey on needle stick injury in hospitals of Pokhara city. This study helped elucidate needle stick injury prevalence, its causes and the level of awareness on injection safety among medical professionals.

131 staff at all levels, including administration, medical services and support services filled in the questionnaires. Of these, 70% had experienced a needle stick injury at some time. Amongst the 100 doctors, nurses and paramedics who participated, 72% had had a needle stick injury or other sharps injury, whereas amongst the 31 support, administration and other staff, the figure was 63%, indicating that the non-medical staff have nearly the same level of risk as the medical staff. However, 71% of doctors, nurses and paramedics had received hepatitis B vaccination, but fewer than half (48%) of support, administration and other staff had, putting them at greater risk of contracting hepatitis following a needle stick injury.

The leading cause of needle stick injury for doctors, nurses and paramedics was medicating patients (26% of injuries), followed by recapping needles (25%) and inserting IV lines (21%). For the other staff, 50% of injuries occurred during waste disposal. Overall, 22% of injuries happened during recapping or waste disposal.

The survey identified both poor awareness of safe procedures and lack of protective treatment. 80% of respondents thought that needle recapping was necessary and only just over half (56%) reported needle stick injuries to their superiors. Only two thirds (67%) of respondents were aware of post exposure prophylaxis just one third (33%) knew anyone who had ever received it.

The hazards of needle stick injuries extend beyond the hospital. Nepal is one of many countries where there is an illegal trade in used syringes. Rag pickers, young and old, seek out syringes in medical waste dumping sites and sell them to scrap dealers. The scrap dealers then sell them on to others who illegally repackage them for sale. Most hospitals require patients to purchase their own syringes in pharmacies or other small outlets, so there are no quality control systems to ensure that the syringes in use are safe.

A number of incidents of repackaged syringe have been reported in the Nepali media, and the issue represents a very serious but so far unquantified public health threat.

To combat the dangers of unsafe injection equipment at all levels in Nepalese society, HECAF has taken SIGN campaign as the tool to promote injection safety issues. HECAF is incorporating safe injection practices into its waste management programmes. Better vaccination, PEP and NSI reporting are promoted, though these policy level changes can be slow to implement. A more rapidly effective method is to train all staff in the medical waste management programmes about injection safety; needle cutters are installed in every ward so that syringes are destroyed at the point of use. There is still a long way to go to eliminate the dangers of unsafe injections in Nepal, but improving practices inside the hospital and strengthening waste management systems so that used syringes cannot harm staff or enter the illegal recycling market, will be important factors in achieving that goal.