



#IVTEAM #Intravenous literature: Qaiser, S., Arif, A., Quaid, S., Ahsan, T., Riaz, K., Niaz, S., Qureshi, H., Ahmed, W. and Alam, S.E. (2013) Innovative Solution to Sharp Waste Management in a Tertiary Care Hospital in Karachi, Pakistan. *Infection Control and Hospital Epidemiology*. 34(12), p.1297-1305.

Abstract:

Background. Prevalence of hepatitis B and C in Pakistan is 2.5% and 4.5%, respectively. Major cause of these infections is reuse of syringes.

Objective. To determine a cost-effective, innovative solution to prevent syringe reuse and break the transmission cycle of blood-borne infections.

Study design, settings, and duration. Analytical study in a tertiary care hospital, Jinnah Postgraduate Medical Centre, Karachi, Pakistan, July 2011 to June 2012.

Methods. Healthcare workers from 30 wards included in the study were trained on injection safety, use of needle remover and needle pit, and management of needlestick injuries. Each ward was provided with 2 needle-removing devices, and a pit was constructed for disposal of needles. Usage of the device in wards and pit use were monitored regularly. **Results.** In 28 (93.3%) wards, sharp containers were accessible by public and were slack. Syringes were recapped using both hands in 27 (90%) cases; needlestick injury was reported by 30% of paramedics, while 25 (83.3%) of the interviewed staff had not received any formal training in

injection safety. Vigilant monitoring and information sharing led to healthcare workers in 28 (96.5%) wards using the device. Needle containers were emptied in 27 (93.1%) wards, and needle pits were used in 26 (96.3%) wards. Needlestick injury was nil in follow-up.

Conclusions. Needle removers permanently disable syringes. The needle pit served as a cost-effective, innovative method for disposal of needles. The intervention resulted in reducing the risk of needlestick injury.



Innovative solution to prevent syringe reuse in a tertiary care hospital
in Karachi, Pakistan | 3



Innovative solution to prevent syringe reuse in a tertiary care hospital
in Karachi, Pakistan | 4

