

1. INTRODUCTION

- Intravenous cannulation is one of the commonest procedures performed by the anaesthetic team, yet used sharps are often left on operating tables, armrests or beds.
- Needle-stick injury is a high-risk occupational hazard in theatre.
- Guided by WHO, JCI and NICE standards, this audit assessed immediate disposal and safe handling of used cannula sharps, and identified barriers to safe practice.

2. OBJECTIVES

- To assess the current practice of sharps handling and disposal after IV cannulation in OT.
- To identify factors contributing to unsafe practices.
- To evaluate the impact of targeted interventions on improving safe disposal and handling.
- If there was a delay in immediate disposal, to ensure safe interim placement of the needle while securing the cannula until proper disposal.

3. METHODS

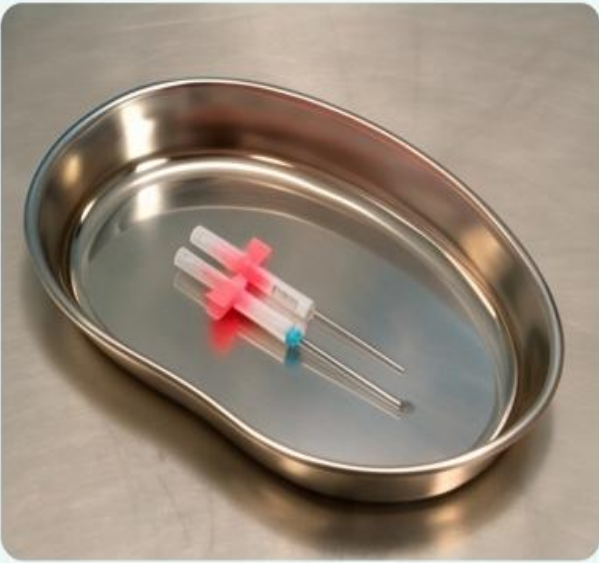
Study Design : Prospective, observational audit (two cycles)
Setting : Operating Theatres, Sir Ganga Ram Hospital, Lahore
Duration : May-July 2026 (one month per cycle)
Sample Size : 300 observations per cycle (n=600)

4. INTERVENTION

- Targeted teaching sessions on safe sharps handling and disposal.
- Visual reminders/posters placed in operating theatres.
- Sharps bins positioned within immediate reach of the OT table.
- Practical interim safe-placement solutions introduced, including:
 - Grey basket with thermocol block
 - Kidney tray
- Emphasis on immediate disposal whenever possible and safe interim placement when immediate disposal is delayed.



Organiser basket



Kidney tray with needle

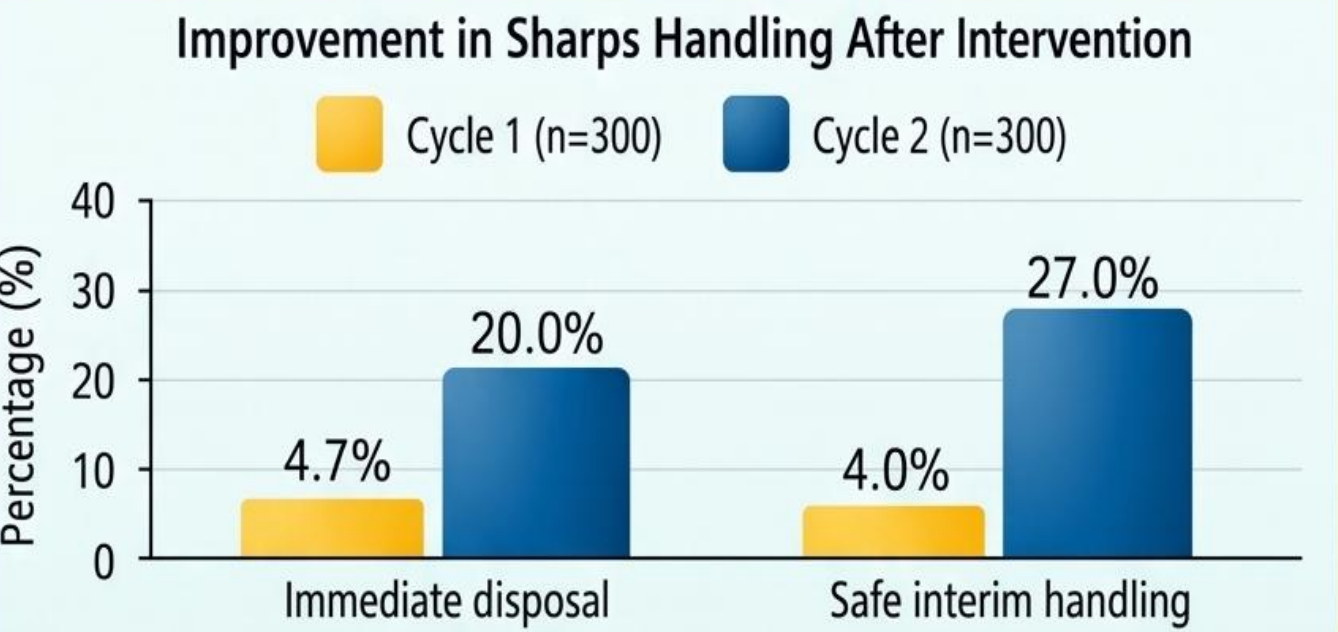


The sharp bins near OT table

Keep the sharps directly within reach.

5. RESULTS

Criterion	Cycle 1 (n=300)	Cycle 2 (n=300)	Change	Significance
Immediate disposal	4.7% (14/300)	20.0% (60/300)	+15.3 pp (4.3x)	p < 0.001
Safe interim handling	4.7% (14/300)	27.0% (81/300)	+23.0 pp (6.8x)	p < 0.001



6. DISCUSSION

- At baseline, immediate disposal (4.7%) and safe handling (4.0%) were markedly low.
- Unsafe practices included leaving sharps on tables/samestrabis, temporary pristiog/iesting and handling charps to offerers.
- Contributing factors included busy workload, distnat/inaccessible lims and established working habits.
- Targeted teaching, posters, accessible sharps biax and practical interim-placement solutions improved immediate disposal to 20% and safe handling to 27% (p <0.001).
- Despire improvement, compliance remained below 100%, highlighting the need to contirued reinforcement.

7. CONCLUSION

- Baseline practice fell short of safe sharps-handling standards, exposing staff to preventable needle-stick injury.
- Education, visual reminders, improved workflow and practical interim-placement solutions led to significant improvement in immediate disposal and safe handling.
- Compliance remains suboptimal. Weekly teaching sessions, reinforcement of WHO, JCI, NICE and CDC/NIOSH guidance, and a six-monthly re-audit planned to sustain and extend these gains, reduce needle-stick injuries, and ensure safe disposal at the point of use.

8. DON'TS



Do not place used sharps on operating tables, armrests or beds.



Do not prick used sharps on surfaces.



Do not hand over sharps for disposal to another person.



Do not keep sharps bins distant or out of reach.