



**Journal of Hospital Pharmacy**  
**An Official Publication of Bureau for Health & Education Status Upliftment**  
**(Constitutionally Entitled as Health-Education, Bureau)**

## An Observational Study to Assess the Adherences of Emergency Crash Cart System in A Tertiary Care Hospital

*Arya Rajendran (Sydney, NSW, Australia), MK Jayanthi (Mysuru, Karnataka),  
 Saddique Choudhury (Mysuru, Karnataka)*

Email Id: [serviceheb@gmail.com](mailto:serviceheb@gmail.com)

### **Abstract:**

**Background:** Crash carts are vital components of emergency preparedness in hospitals, containing essential drugs and equipment required for immediate resuscitation. Standardization and adherence to crash cart protocols are crucial for minimizing errors and improving patient outcomes during emergencies. This study was conducted to assess the adherence of emergency crash cart systems in a tertiary care hospital and identify existing gaps. **Methods:** A quantitative, observational, and descriptive study was conducted over a six-month period (July–December 2024) at JSS Hospital, Mysuru. A total of 180 crash cart observations were made across ICUs and general wards using a structured checklist adapted from validated tools. Parameters evaluated included equipment content, labelling, documentation, and functionality. Data were analyzed using SPSS v25, and paired t-tests were applied to assess differences before and after the intervention. **Results:** A total of 17 crash carts were evaluated (7 in ICUs, 10 in wards). Significant improvements were observed post-evaluation in terms of organization, labelling, and documentation of medications and equipment. Drugs like adrenaline (41.6%) and atropine (25.6%) were most frequently available. Labeling strategies reduced confusion from look-alike, sound-alike, and high-alert drugs. Availability of defibrillators and AEDs varied across departments, with some critical units lacking them. Post-intervention data showed a statistically significant improvement in equipment and drug availability (mean:  $21.7 \pm 12.9$  vs.  $19.89 \pm 12.44$ ). **Conclusion:** The study highlights the critical role of standardized crash cart systems in emergency care. Improved compliance was observed with minimal interventions, emphasizing the importance of structured protocols, regular audits, and staff training. Establishing dedicated monitoring and replenishment mechanisms can enhance readiness and potentially save lives during emergencies.

**Keywords:** Crash cart, emergency preparedness, medication safety, hospital audit, tertiary care hospital, medical equipment adherence, Materiovigilance.

Access this Article Online	<b>Quick Response Code:</b> 
Website: <a href="http://www.journalofhospitalpharmacy.in">http://www.journalofhospitalpharmacy.in</a>	
Received on 28/05/2025	
Accepted on 6/06/2025 © HEB All rights reserved	