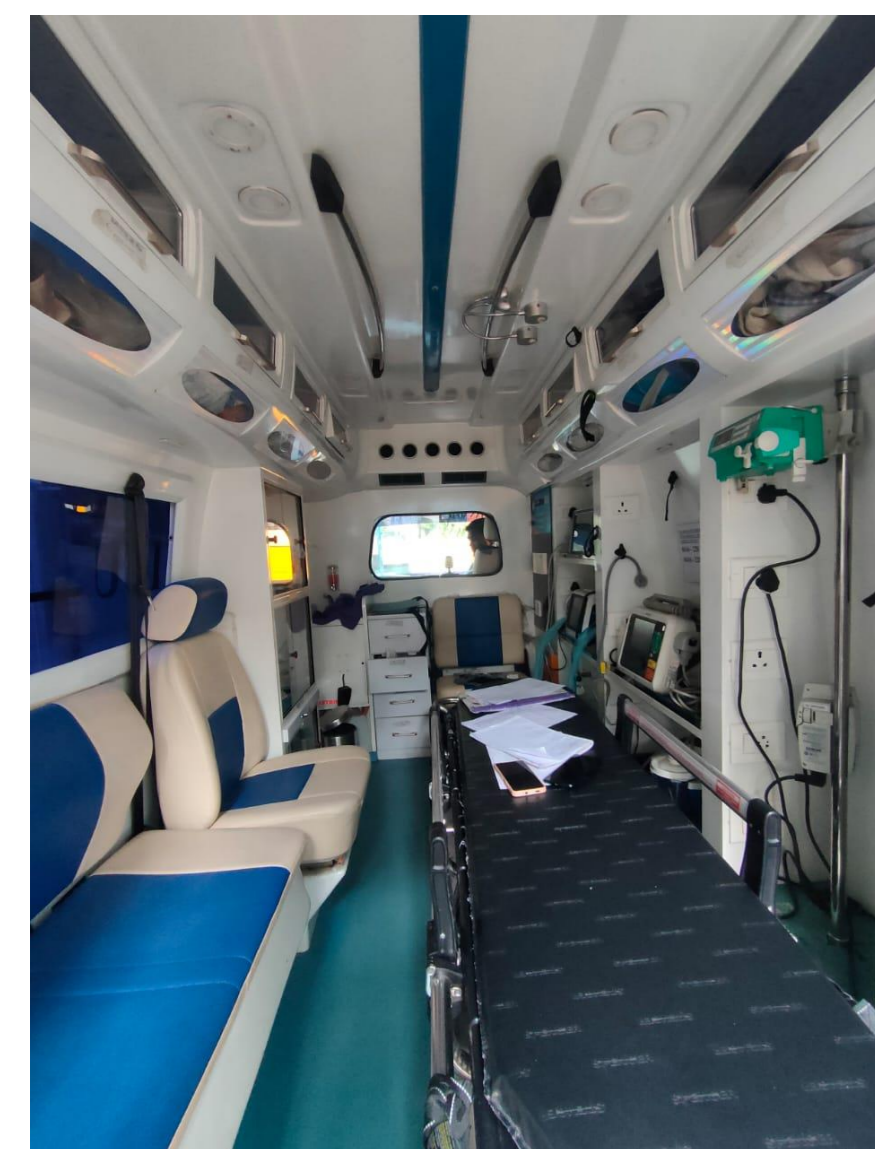


INTRODUCTION / BACKGROUND OF THE STUDY



Ambulances contribute significantly to public safety by lowering death and morbidity rates. Hospitals in India are under pressure to prioritize their core competencies— managing their patients and giving outstanding care as the global healthcare industry is expanding at exponential rates. Managing the ambulance services is one of the major management challenges hospitals face and hence emergency medical services are being outsourced to leading-edge companies to meet the urgent requirement for a fleet of well-maintained ambulances in hospitals, leaving the end user happy also it is found that private ambulances reduce costs and perform better on contracted measures such as response time.^[1] Ambulances must comply with standard operational specifications in order to be prepared to handle medical emergencies.^[2] Even if an organization contracts with an outside ambulance provider, it is the hospitals’ responsibility to verify the compliance and training efforts implemented by the outsourced partners.

AIM AND OBJECTIVES

1. The primary objective of the study was to describe and understand the current system of outsourced ambulance services in the tertiary hospital.
2. The secondary objective was to assess operational compliance of outsourced ambulance against standard guidelines and to identify the gaps in operational compliance and its causes.
3. The study also aimed to provide suggestions towards operational compliance.

METHODOLOGY

(a) Structured interview with in-charge, transport department

The assistant manager is a member of the transport department who support the transport department and effectively supervise all the functions of the department. We interviewed the in-charge to understand the current system of outsourced ambulances services in the hospital.

(b) Checklist and observation

Three different types of checklist^[2] were used- ALS checklist, BLS checklist and mortuary checklist to assess Advanced Life Support (ALS) ambulance, Basic life support (BLS) ambulance, mortuary ambulance respectively. Observation acted as qualitative method and to notice the actual incidents in the natural setting.

(c) Cause and Effect Analysis

Cause and effect analysis^[3] is an assessment tool that combines brainstorming and mind mapping techniques to explore the possible causes of an issue. We assessed all the on site ambulances based on the checklist to identify the gap in the compliance performance of each ambulance and its impact in the compliance proportion.

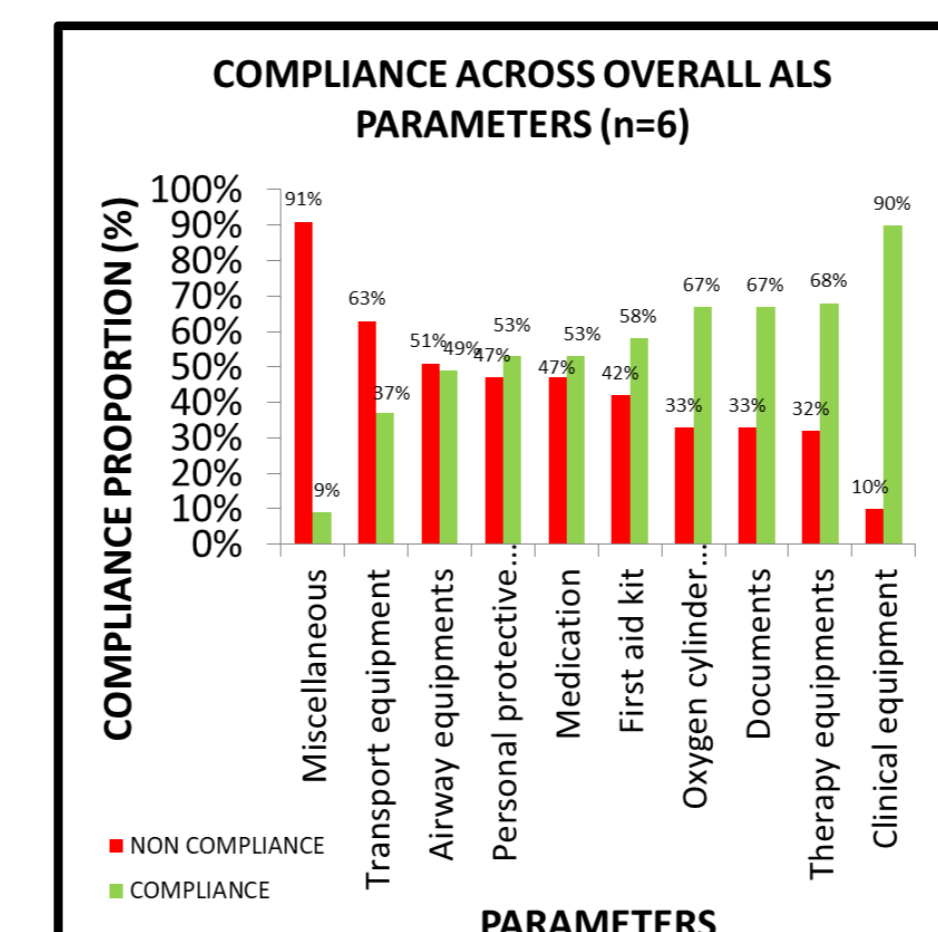
Inclusion criteria: All outsourced ambulances.

Exclusion criteria: Institutional ambulances

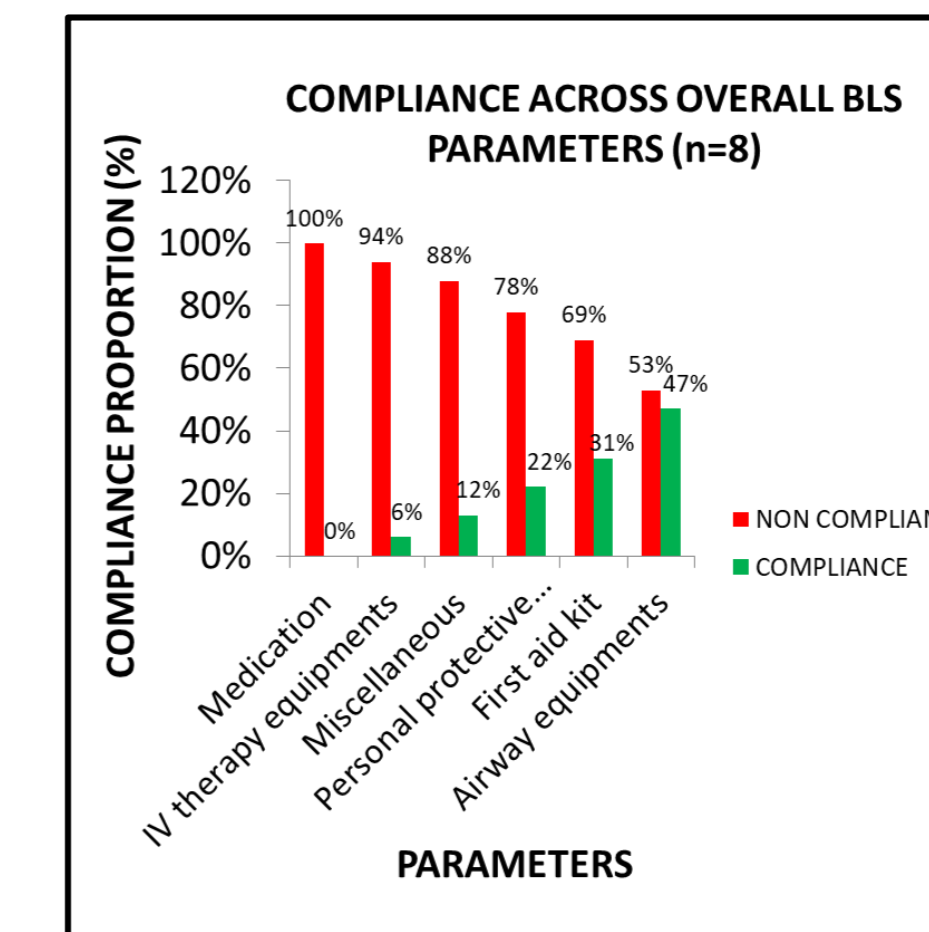
RESULT AND DISCUSSION

Organisation	ALS Ambulance	BLS Ambulance	Mortuary Ambulance
a	1	2	2
b	2	2	1
c	2	3	2
d	1	3	1

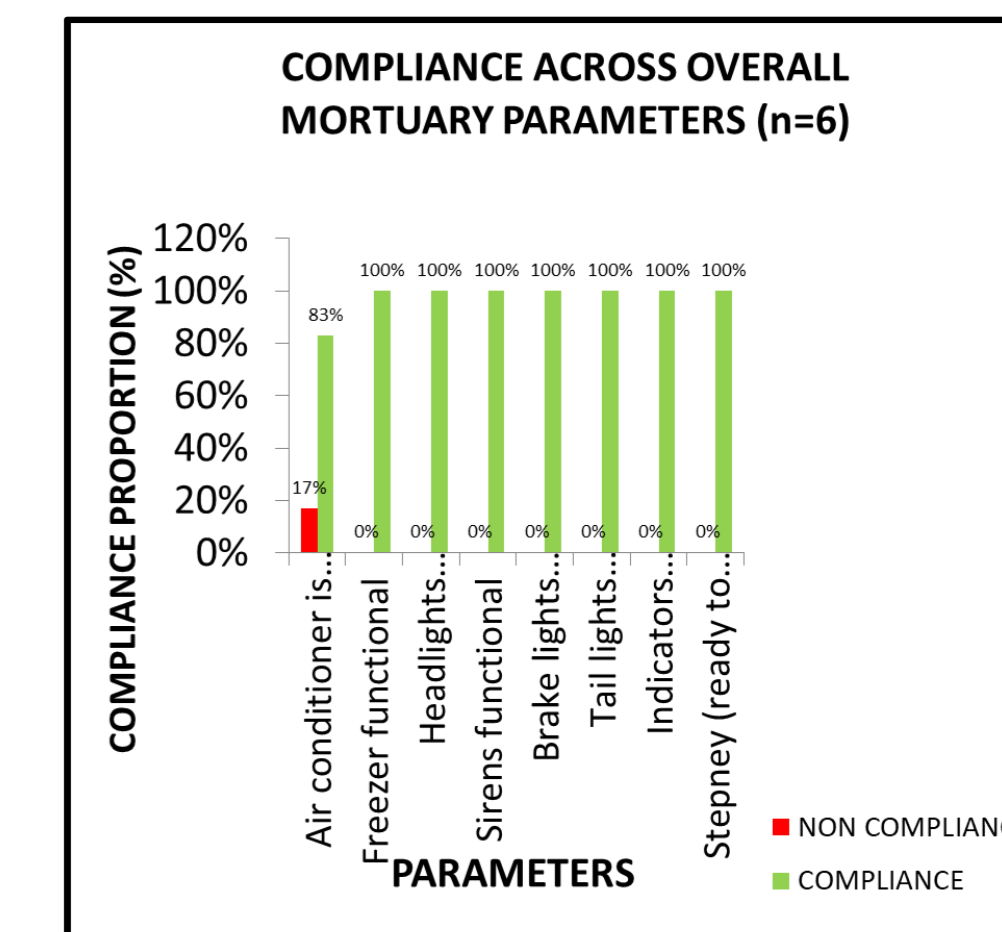
(a)



(b)



(c)



(d)

- (a) The hospital is associated with four outsourced ambulance organisations and there are 22 ambulances (6ALS, 10 BLS and 6 mortuary ambulances) in total being provided by the outsourced agencies.
- (b) Considering overall ALS parameters for its compliance, out of 6 outsourced ALS ambulances, highest level of non-compliance was observed in the miscellaneous parameters (91%), followed by transport equipment (63%) and airway equipment (51%). The lowest non-compliance was observed only for clinical equipment (10%).
- (c) Regarding compliance across overall BLS parameters, out of 8 outsourced BLS ambulances, highest level of non-compliance was observed in medication (100%), followed by IV therapy equipment (94%) and miscellaneous parameters (88%). Non-compliance was also observed across all ambulances for PPE (78%) followed by first aid kit (69%). The lowest non-compliance was observed only for airway equipment (53%).
- (d) Regarding compliance across overall mortuary parameters, out of 6 outsourced mortuary ambulances, non-compliance was observed only in working condition of air conditioner (17%). Nil non-compliance was observed in freezer functionality, headlights functionality, sirens functionality, brake lights functionality, tail lights functionality, indicators functionality and stepney availability (0% each).

CONCLUSION

The results indicate that operational compliance of mortuary ambulance is better than the ALS and BLS ambulances. The ALS parameters such as miscellaneous items, transport equipment, airway equipment, PPE and medication have to be given immediate attention followed by other mentioned parameters. In all BLS ambulances, it is commonly seen that either majority of the checklist items were not present or no equipment/ things were present. Hence all the BLS parameters have to be addressed. The suggestions include that the organizations have to work on implementing the new checklist to all ambulances and make sure the ambulance manpower is also aware of the checklist. Attention towards medication is important, expiry date of the medications has to be checked frequently and it has to be disposed accordingly. Overall hygiene and cleanliness factors have to be considered, the drawers and the racks have to be cleaned frequently and the equipment has to be organised and stored hygienically. To conclude, a periodic evaluation of operational compliance is necessary to determine whether contracted ambulance services are operating in compliance with regulations and are prepared for emergency calls.

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