

Integrated Logistic Support and Equipment Availability in Government Hospitals of a Developing Country

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Abstract

This study examines the perceived integrated logistic support and the equipment availability of seven equipment categories in four selected base hospitals in Sri Lanka. This includes measurement of actual downtime of eighty five pieces of medical equipment prospectively by direct observation for a period of sixty consecutive days. The logistic support considerations were: preventive maintenance support, corrective maintenance support, supply support, facility support, staff availability and training and skill support. These were assessed in terms of eighteen constructs as perceived by the operator staff.

The results indicate that 57% mean operational availability and technical faults accounted for 77% of the downtime. Low practices of periodic inspections, service agreement support and maintenance planning were noticed. Speedy fault reporting was observed but fault inspections were relatively late. Lack of consumables and lack of facilities resulted in 7% downtime each. Twenty five pieces of equipment had zero availability throughout the study period. Furthermore, corrective maintenance support ($r=0.66$) and preventive maintenance support ($r=0.44$) were positively correlated with operational availability and such associations were statistically significant. The study suggests that health managers should focus more on preventive and corrective maintenance and take measures to improve equipment availability.

Key words: Equipment availability, Integrated logistic support, Operational availability, Downtime, Preventive maintenance support, Corrective maintenance support, Supply support, Facility support, Staff availability and Training and Skill support,

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