

## ABSTRACT

Health care systems are accountable to ensure safety and to provide a cost-effective service to the patients and the community. Safety is a dimension of quality which is an inherent continuous process of a Healthcare System. Due to the catastrophic nature of medical errors, healthcare systems have now started adopting principles of High-Reliability Organizations (HROs). Progress in implementing HRO practices needs to be identified.

This was a hospital-based descriptive, cross-sectional study carried out in Accident and emergency care (A and E) units in three selected tertiary care hospitals in Western province, Sri Lanka. The study population was the staff working in respective hospitals, including doctors, nurses who are having direct clinical contact with patients. Data was collected using a self-administered questionnaire which contained two parts. First part regarding the practice of HRO principles which included five practices of five HRO principles, as dependent variables (Sensitivity to operations, Preoccupation with failure, Deference to expertise, Commitment to resilience and Reluctance to simplify interpretations) There were 25 questions in part A. Part B included five independent variables (organizational safety culture, leadership, communication, team structure and work environment). There were 25 questions in part B. Results were analyzed quantitatively and qualitatively. To check the five HRO practices (dependent variables), which are mentioned above, an observation checklist was also used. A total of 385 participants responded in the study.

"Sensitivity to operations" (Mean: 4.69, SD: 0.64) has the highest mean out of the five HRO Practices and "Difference to Expertise" (Mean: 4.2, SD: 0.81) has the lowest score.

In the comparison of High-Reliability Principles with a benchmarked High-Reliability Organization's practices, there was an extremely significant (less than 0.0001) difference in the practices of HRO principles between selected A and E Units and High-Reliability Organization.

Organizational safety culture shows significant ( $< 0.01$ ) effect on determining the variance of HRO practices if Organizational Safety Culture operates together with the other four independent factors, 29% of the reliability of the HRO practices (dependent variable) can be explained by Organizational Safety Culture.

Selected A and E Units differ in practising HRO principles than benchmarked High-Reliability Organization. Organization safety culture, which is essential in determining HRO practices, needs to be strengthened.