The Evaluation of Human Factors Intervening Cases of Medication for Patient Safety Improvement

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Due to several medical accidents breaking out, patient safety is getting more emphasis. People have raised attention to human factors (ergonomics) approach to improve patient safety. The purpose of this study is to evaluate the situation of human factors intervening medication for patient safety improvement cases and provide the advanced human factors knowledge to medication in hospitals and to reduce the risk of human error in hospitals. The cases are from Taiwan Joint Commission on Hospital Accreditation (TJCHA) collected from hospitals. The cases have been reorganized by the domains view of ergonomics; graded by the level how they approach of ergonomics and quantified to do statistical analysis. The results shows that percentage distribution of ergonomics knowledge using for medication safety promotional are physical ergonomics (5.41%), cognitive ergonomics (21.62%) and organizational Ergonomics (72.97%). Some recommendation for increasing medication safety have been presented to all levels of medical institutions for reference study.

Keywords

Human factors, patient safety improvement, hospitals

Biography

Chih-Wei Lu is the Associate Professor in the Department of Industrial and Systems Engineering, Chung Yuan Christian University, Taiwan ROC. He hold Doctor of Science at Work Environment Department, Massachusetts State University, USA. He was the Executive Director and Chairman of Organizing Committee of Taiwan Ergonomics Society (EST) and Chairman of the GPDB sub-committee International Ergonomics Association (IEA). Currently, he has been director of Ergonomics and Kansei Laboratory, Industrial and Systems Engineering Department and director of the Center of Productivity, the Chung Yuan Christian University, He has provided many workshops, trainings and consultancies in the area of Ergonomics, Safety and Hazard Control. His specialties include Occupational Safety and Health, Biomechanics, Human Factors Engineering and Ergonomics. He is member of IEA, EST and IEEE.