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Multitasking in healthcare systems

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Multitasking in health care refers to the physician and their assistant dealing with more than one task simultaneously over the same period during surgery or in other operations of the health care system. The multitasking in healthcare system is also a big challenge and has esteem importance. Physicians, Nurses, Dispenser (Medicine collector) and patients are the key stakeholders for this system. The aim of this study is to determine the impact of multitasking by hospital physicians, nurse and operator performance. The method to evaluate the performance of the each stakeholder is done using a time and motion study in King Khalid university hospital. The performance measures multitasking activities during medicine distributions, nursing and surgery/operations. The effect of these input factors is assessed through the satisfaction of patients. Ten stakeholders (surgeon, nurses, medicine distribution unit at pharmacy and patients) were observed. The patients are observed after the activity is performed through an interview. Then the response of each patient is calculated on a likert scale (from 1 to 5) and is evaluated and analyzed. The research highlights for each category of multitasking is proposed at the end. Physician surgery supposed to be the most caring area and need more attention during multitasking. Nurse's patient caring and medicine distribution are least area with respect to danger. Each area has its own importance; especially in cardiac surgery when number of patients waiting are too large and surgeons are limited. In these types of cases, they have to do multitask to serve more patients corresponding to decrease the death rate.

Biography

Mohammed Alkahtani is an Assistant Professor in Industrial Engineering Department at King Saud University (Riyadh, Saudi Arabia). He received a BSc degree in Industrial Engineering from King Saud University (Riyadh, Saudi Arabia), an MSc in Industrial Engineering from the University of Central Florida (Orlando, FL, USA), and a PhD in Industrial Engineering from Loughborough University (Loughborough, UK). He has diverse expertise in Analysis and design of manufacturing systems, logistics, supply chain and operations management; application of simulation, mathematical modeling and optimization techniques to solve supply chain, logistics, and manufacturing systems problems; business process improvement and organizational design, responsiveness measurement, response modeling, lean and agility in manufacturing and supply chain.

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