

ABSTRACT

Muhammadiyah Hospital Bandung is one of the Islamic hospital located in Bandung, in which it has 13 indoor units, including action room and hospitalization. Service facilities and activities among the units in Muhammadiyah Hospital are interconnected to one another, one of the activities that relate to each other is the removal of the patient from the emergency room to the patient room.

Muhammadiyah Hospital did not have the supporting equipment for moving the patient, therefore it leads to a risk that is evidenced by the results of risk identification using MAPO index amounted to 100%, this would cause a risk of MSDs are perceived by nurses while moving the patient.

Using the method of product development called Ulrich-Eppinger through four phases: planning, concept development, system level design and detailed design, is expected to reduce the risk of MSDs to the nurse in moving the patient.

Equipment design for moving the patient is done by brainstorming process with the user or the nurse in order to make the design appropriate with the needs of nurses and can reduce the risk of MSDs while moving the patient. The recommendation is the supporting equipment that is helpful to minimize the perceived risk of MSDs based on posture while using the equipment.

Keywords— supporting equipment for moving the patient, MAPO index, Ulrich-Eppinger, REBA, Rapid Entire Body Assessment, User Acceptance