READINESS ASSESSMENT OF TELE-ICU IMPLEMENTATION IN TECHNICAL AND HUMAN ASPECTS IN TEACHING HOSPITALS WITH ICUS AFFILIATED WITH ISFAHAN UNIVERSITY OF MEDICAL SCIENCES IN 2015

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ABSTRACT

Introduction: Tele-ICU is a solution for the shortage of intensive care specialists, thus providing simultaneous health care services in several ICUs. The study aimed to determine readiness of Tele-ICU implementation in technical and human aspects in teaching hospitals affiliated with Isfahan University of Medical Health (IUMS).
Methods: The research was a descriptive analytical study. Samples included 16 anesthesiologists and 120 nurses having experience in ICU, which were chosen through convenient sampling. This method was not conducted for information technology (IT) official due to societal limitations; a census was performed instead. For data gathering, questionnaires and checklists were used. Content and face validity were confirmed by IUMS health information technology (HIT) and computer professors. The average correlation reliability coefficient for physicians–nurses and IT officers questionnaires were 0.93 and 0.96, respectively. Technical checklists were completed through researcher's direct observation. Collected data were analyzed using descriptive statics (frequency, mean, percentage) and inferential statistics methods (t-test, ANOVA) by SPSS software.
Results: Given infrastructure-hardware facilities, technical readiness was assessed as moderate (meas positive responses was 54.7%). The level of knowledge was measured with seven questions, and a third quartile (above 75%) of correct answers was considered as desired knowledge, which included 56.6% of sample. The problems and barriers of project implementation from the perspective of samples were found to be "high cost to set up and resources constraints," which are the main obstacles to set up a tele-ICU, with 65.2%.
Conclusion: Improving technical infrastructures, developing a comprehensive strategic plan, and the deployment of tele-ICU standards and creating electronic records, organizing training courses to raise knowledge and promote culture of applying tele-technologies are recommended.
KEYWORDS: Tele-ICU, Teaching Hospital, Implementation, Technical and Human Dimensions