

Analysis of the factors influencing the using AED device in pre-hospital emergency medical center

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Introduction: Have appropriate knowledge in the use of AED devices to save the lives of patients is of great importance for operational staff of medical emergencies. The resultant studies showed weakness use of the device in emergency operating units. This study aimed to Analysis of the factors influencing the using AED device in pre-hospital emergency medical center.

Method and Material: This is descriptive qualitative-quantitative combination study recorded Failure Mode and Effect Analysis method in 2014. Sample was 16 subjects employed emergency medical service of kordkoy. The subjects selected in available sampling. The Risk Priority process .Failure Mode and Effect Analysis checklist recorded in the questionnaire. The dates study collected with group, interviewing method and meeting FMEA team in during per 14 day. Data analyzed Descriptive statistics .Risk Priority Number (RPN). The suitable tasks suggested in $RPN > 125$. The reality study had 87.5%.

Results: The most important factors influencing the use of AED devices familiarity with the using the device method and hemodynamics and cardiac patients. The results identified 7- error agent including to Lack of familiarity with how to use the device, Lack of familiarity with the rhythms and mechanism of action of heart, Devices useless, Not having enough time to deliver the Interventions, disproportionate knowledge of the academic employees with career field, Fear of damage to the patient and lack of organizational supports. The error were 5 subject in $RPN > 125$ included lack of familiarity with how to use the device ($RPN=240$), lack of familiarity with the rhythms and mechanism of action of heart ($RPN=180$), disproportionate knowledge of the academic employees with career field ($RPN=160$), and lack of organizational supports ($RPN=180$). The underline error agent relate to human error (the 3 error) .organization error (the 4 error) and environment-technical error (the 2 error). The most error agent in 3 domains related to lack of familiarity with how to use the device ($RPN=240$).

Conclusion: organization error is the most important reason of using AED device in pre-hospital emergency medical center. Training providing, systematic planning and development and promotion of employees role play affect in of increases mutation action, improve present status, and delivering other services Clinical.

Keywords: Error, Risk, Emergency Medical, Pre-hospital, AED device

