Critical Care Nurses' Attitudes Related to Alarm Fatigue in Jordanian Hospitals

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ABSTRACT

Background: Critical care unit is a place where clinical alarms occur frequently; of which many are false alarms, which leads to what is called 'alarm fatigue'. Alarm Fatigue occurs when nursing staff are exposed to a large number of false alarms, which can cause alarm desensitization. Alarm fatigue in ICU was found to be an international problem and the number one medical technology related hazard.
Purpose: the purpose of this study was to examine the attitudes of critical care nurses related to alarm fatigue in Jordanian hospitals.
Methods: A cross-sectional descriptive quantitative design was used at four private and two governmental hospitals in Jordan. Clinical Alarm Survey developed by Healthcare Technology Foundation (HTF) in 2011 was distributed to the ICCU and NICU nurses.
Results: A total of 222 registered nurses who worked in a critical care units setting responded to survey, representing a response rate of 74%.The average years of experience were two years. Mean age was 26 years old (3 years) which might indicate a relatively young nurse population. The majority of respondents (86.4%) highly agreed that differentiation of alarm sounds was important, and (71.6%) agreed that noise alarms disrupt patient care. Participant responses were mixed (56% - Agreed vs. 44% - Disagree) on statements the ICCU staff are sensitive to alarm and response quickly .While 79.6% of respondents highly agreed that the adoption of smart alarms would be reduce false alarms, 65.3% from participant believed that the noisy alarms occur frequently. In terms of relationship with demographic variables, there was a weak positive significant relationship between years of experience and attitude toward clinical alarm. On the other hand, there was no significant relationship between gender and attitude towered clinical alarm.
Conclusion: Though the role of technological advancement in providing sophisticated care for the patient in ICCU is prominent, there is a need to control machines related alarms through proper mechanisms including policies, staff orientation, and cooperation of biomedical department. Assessment of clinical alarm related risk and fatigability is vital to ensure safer patient care.

Key words: *Alarm fatigue, clinical alarm, noise alarms, patient safety, and false alarms*.