To determine the compliance with nursing drug administration procedure steps associated with access to the central venous catheter for bolus infusion in intensive care units” Gürol Arslan et al (2019).

Abstract:

AIM: To determine the compliance with nursing drug administration procedure steps associated with access to the central venous catheter for bolus infusion in intensive care units.

METHODS: This observational study was conducted with 30 nurses working in an intensive care unit of a university hospital. The drug administrations practiced by nurses via central venous catheter were monitored simultaneously at 12:00 a.m., 02:00 p.m., and 06:00 p.m. by two observers. The data were collected using a data collection form and central venous catheter drug administration procedure steps.

RESULTS: A total of 90 different drug administrations were observed in three different treatment hours from 30 nurses. The interobserver conformity was found to be moderate in two steps (kappa = 0.520-0.627, P = 0.01) and perfect in all other steps (kappa = 0.821-1.000, P = 0.000). According to the drug administration procedure steps via a central venous catheter, all nurses applied the following steps correctly during all treatment hours: drug card control, preparation of treatment materials, checking the patient’s identity, and
steps of drug treatment administration. The following tasks were frequently performed incorrectly or not at all: hand hygiene (before treatment 87.8%; after treatment 82.2%), scrubbing the three-way stopcock entrance with an alcohol swab (55.6%), waiting for the alcohol to dry (81.1%), and flushing the lumen with a compatible fluid (before treatment 84.4%; after treatment 75.6%).

CONCLUSION: Observation of drug administration procedure steps via central venous catheter according to the treatment hours showed that the nurses performed many incomplete or inaccurate drug administration procedure steps and the mistakes increased toward the evening hours.

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