Abstract

Title : Improving drug prescription and administration safety – a breakthrough project

Keywords: Breakthrough project, Safe Medication Practice,
medication errors, adverse drug events, medication reconciliation, risk analysis

Type of poster: A development project at Intensive Care Unit Karolinska University Hospital, Solna

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Background: At our unit many medications errors were registered during 2008, some of them with severe outcome for patients. This led us to participate in a hospital-wide breakthrough project entitled Safe Medication Practice.

Purpose: Our purpose was to identify factors increasing the risk of medication error. Potential risk factors include the process for drug prescription and administration, nurse's interaction with technical equipment involved in drugs.

Method: All members of the staff were asked to share their views on factors increasing the risk of medication errors. We used a risk analysis tool to grade the importance of each identified risk factor. The tool provides a score which is the product of the likelihood that the event occurs and the consequences if it does. Participation in the Safe Medication Practice project continued through 2009.

Result: The risk analysis tool identified twelve factors with a high score. Some errors took place in the environment for drug preparation and administration. This work is done in a tight space and nurses are very often interrupted during the process. We introduced eight barriers during the project. During 2009 we observed a reduction in the numbers of drug incidents and severe drug events. We had one severe drug events, which was caused by different drugs being delivered in nearly identical boxes. Today this risk factor has been eliminated by using a different supplier only for this drug. At the Karolinska University Hospital, prescriptions on general wards are documented in TakeCare® (a digital journal). In contrast, at our ICU prescriptions are documented using a patient data management system, Clinisoft®. To avoid the simultaneous use of two different systems we have introduced a new routines how to report and document ongoing medication for patients transferred between our ICU and a general ward.

Discussions/conclusions:
The risk analysis proved useful in identifying risk factors and provided us with ideas for improvements in several steps of the medication prescription, preparation and administration process. Implemented barriers resulted in a reduced number of medication errors.