5810: Impact of an educational program for reduction of central line associated bloodstream infection in non ICU settings: focus on maintenance practices

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INTRODUCTION AND PURPOSE

Best practices during central line insertion are a recognized method to prevent central line associated bloodstream infection (CLABSI). In hospitals where this first step is already accomplished, well-established central line maintenance practices are essential to CLABSI prevention and it is now a focus of performance improvement and quality assurance in patient care. However, despite recognition of the importance of central line maintenance, compliance to best practices may be inadequate in non-ICU wards, which have not generally been included in CLABSI prevention efforts. The purpose of this study was to develop, implement, and evaluate a central line care maintenance bundle designed to optimize central line maintenance practices and reduce CLABSI in non-ICU setting.

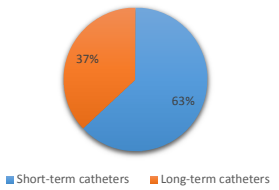
METHODS

This is an ongoing before-after study conducted at Hospital Moinhos de Vento, a private hospital in south Brazil. From January to July 2016, patients in wards with a central line received a standard care and once a month a group of specialized nurses reviewed in a point/prevalence approach insertion sites and dressings. After August, we formed the "Infusion Therapy Team" (2 infection control nurses, 10 nurses and 2 nurse-technicians) that once a week visits all wards emphasizing with an educational approach hand hygiene prior manipulation, proper dressing change procedure, disinfection of catheter hubs prior to central line manipulation, besides looking for insertion site signs of infection.

RESULTS

Since January 2016, forty-five CLABSI were identified in non ICU-wards (38 patients).

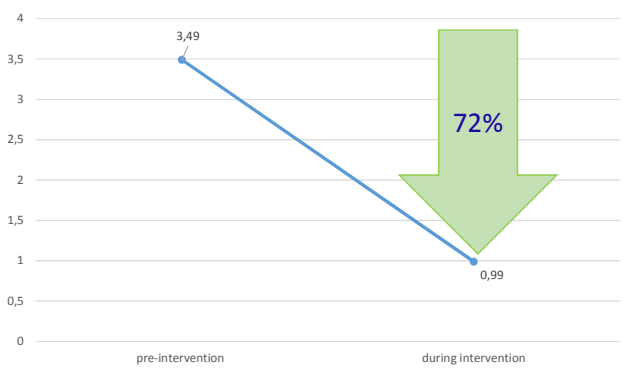
Percetage of Catheters Type



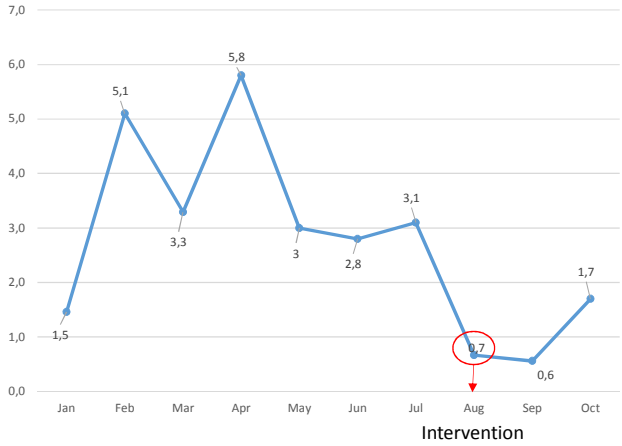
Time Between Insertion and CLBSI diagnosis (days)

	Median	Min	Max
Short-term catheters	19	2	72
Long-term catheters	44	4	299

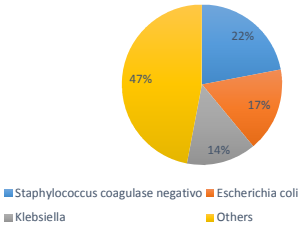
Density of Incidence of CLABSI (1000 cath/day) Pre and During Intervention Non-ICU Setting



Density of Incidence of CLABSI (1000 cath/day) 2016 Non-ICU



Microorganisms More Frequently Isolated



CONCLUSION

The implementation of an educational program for adequate process on maintenance of central lines significantly reduces the incidence of CLABSI. A team focused on prevention with systematic actions, even without introduction of new technologies aimed to prevent infections, has a positive impact in reducing CLABSI without increasing costs. The next step for improving infections rates will be daily reassessment of the need for continued central line access.