Sustained CRBSI reduction through IV catheter bundle enhancement: A Perspective from Switzerland

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In the context of COVID-19 crisis, it has been of utmost importance to maintain current ICU protocols and effectively prevent catheter associated bloodstream infections. Not only that such complication might compromise all attempts to save patients lives, but may also decrease patient throughput and overall ICU efficiency.

Catheter associated bloodstream infections (CABSI) are among the most preventable nosocomial infections. Over the 90s, a series of clinical studies showed that education to uniformized multimodal approach for insertion and handling of vascular accesses resulted in 8-fold reduction of the rate of infections 1. Nowadays popularized as “catheter bundle” and included in guidelines with a high level of evidence, this concept largely contributes to the continuous improvement of the quality of the care in critically ill patients requiring ICU management and has expand to other wards of many hospitals. Over an 11 year period of observation, enhanced catheter bundle including chlorhexidine-based skin disinfection and the use of chlorhexidine-based disinfectant dressings further sustained reduced 6-fold rate of infections, that fell below 0.1 episodes per 1000 catheter-days 2. Furthermore, this impact could have been maintained over the COVID-19 waves despite huge work overload. This may suggest that despite the pandemic setting, such easy to apply and trained procedures could make easier and safer the rapid extension of ICU capacity by redeploying staff usually working outside the ICU 3.

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