# Abstract for NORNA 2020

**Title:** “Splash basins- clean or contaminated?” A quantitative study on bacterial growth in splash

basins used to clean surgical instruments perioperatively.

**Background and purpose:** Surgical nurses should focus on preventing postoperative

infections and promote patient safety. Part of the work consists in identifying potential

sources of contamination and eliminating these. This study´s aim was to uncover potential bacterial

growth in surgical instruments splash basins during operations, and to point out which

variables can affect this.

**Method:** Quantitative method of collection, cultivation and analysis of water samples

obtained at operations performed on the thoracic and neurosurgical

department, to identify bacterial growth. A data collection form was made, for mapping

different variables.

**Results:** Cultivation showed growth of bacteria from the splash basins on both departments.

Bacterial growth was found in 44% of the final samples, respectively 41% from the thoracic

surgical and 47% from neurosurgical department. There is no evidence of a correlation

between bacterial growth and department, length of operation, number of persons in the

operating room or the amount of door openings. The most common types of bacteria found

were coagulase negative staphylococci and Micrococcus Luteus.

**Conclusion:** The study shows that the splash basin gets contaminated with bacteria. The

bacteria detected may be pathogenic. The findings are congruent with findings made in other

studies, and it is therefore recommended not to use splash basins. There should be more

research on this site, in order to conclude what is the best practice regarding cleaning

instruments perioperatively.

**Key words:** Splash basin, operating room, surgery, bacterial load



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