

**P2660 Impact of an infection control service on rates of nosocomial infections in a University psychiatric hospital: results from an 18-year surveillance in Switzerland**Andrea Büchler\*<sup>1</sup>, Marc Dangel<sup>1</sup>, Sarah Tschudin-Sutter<sup>2</sup>, Marc Vogel<sup>3</sup>, Andreas F. Widmer<sup>1</sup><sup>1</sup> Division of Infectious Diseases & Hospital Epidemiology, University Hospital Basel, Basel, Switzerland, <sup>2</sup> University Hospital Basel, Switzerland, Basel, Switzerland, <sup>3</sup> Division of Addictive Disorders, University of Basel Psychiatric Hospital, Basel, Switzerland

**Background:** In contrast to acute care hospitals and long term care institutions, few studies addressed the prevalence of nosocomial infections (NIs) in psychiatric hospitals. In acute care hospitals, 5-15% of hospitalized patients acquire a NI. To our knowledge, the only published data on point prevalence of NIs in a large a psychiatric hospital reports a point prevalence of 0.71% (Deutsche nationale Punkt-Prävalenzerhebung zu nosokomialen Infektionen und Antibiotika-Anwendung 2016, [www.nrz-hygiene.de](http://www.nrz-hygiene.de), report in german). We thus sought to determine prevalence and in addition, to assess the impact of a new infection control service in an academic psychiatric hospital.

**Materials/methods:** PI From 2001 to 2018, 8 prevalence studies were conducted at the university psychiatric hospital in Basel, Switzerland, a 309-bed hospital with approximately 3'300 admissions per year. Studies were done during a one to seven day period. Inclusion criteria were hospitalization for more than 24 hours (2001-2003) resp. more than 48 hours (2004-2018). Nosocomial infections were defined by the criteria outlined by Centers for Disease Control and Prevention. Infection control service includes weekly visits at the hospital, hygiene guidelines and outbreak management.

**Results:** Overall, prevalence of NIs decreased from 4.2% in 2001 to 0% in 2018 ( $p < 0.01$ , Fig. 1). The most common nosocomial infections were urogenital infections (50%), followed by skin and soft tissue infections (15.8%), respiratory infections (7.9%) and gastroenteric infections (2.6%). Data of the focus of infection was missing in 23.7%. The mean length of stay was 33.6 days (SD 0.60) during the study period, significantly longer than at the acute care University Hospital Basel (6.5 days, SD 0.58;  $p$ -value  $< 0.00001$ ).

**Conclusions:** Prevalence of nosocomial infections was low in a psychiatric hospital despite long mean lengths of stay. The introduction of a professional infection control service further decreased prevalence over an 18-year study period.

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