

Associated Blood Stream Infection) & CAUTI (Catheter Associated Urinary Tract Infection) in our hospital - a quaternary care centre in India.

**Objectives:** To describe the epidemiology of HAIs, mainly CLABSI (Central line Associated Blood Stream Infection) & CAUTI (Catheter Associated Urinary Tract Infection) in our hospital - a quaternary care centre in India.

**Methods:** A retrospective study of case files of patients identified with a HAI during the period of January 2018 to December 2018 was conducted. HAIs were identified as part of routine infection control and prevention surveillance using the Centre for Disease control & National Healthcare Safety Network Criteria (CDC NHSN 2018) definitions. Rates were calculated and analyzed. The microorganism isolated and their antibiograms were also analyzed.

**Results:** Of 7484 patients included in the study, 2652 patients had a central line and 6711 had an indwelling urinary catheter. The rate of CLABSI was 3.8 per 1000 catheter days. The age group most affected was less than 20 years. Gram Negative bacilli was the most common isolate of which *Klebsiella pneumonia* accounted for 30.7% . 41.66% of the *Klebsiella pneumoniae* strains showed multidrug resistance (MDR) and were resistant to the Carbapenems.

62 CAUTIs were identified during the study period with an incidence rate of 2.94/ 1000 catheter days. The most common age group was over 60 years (41.9%) and male sex was more commonly affected (51%). 51.6% of the patients were admitted with neurological diseases of which 24 required neurosurgery and had long duration of catheterization. The most common pathogen isolated was *Klebsiella pneumoniae* with around 59% being resistant to the Carbapenems and MDR

**Conclusion:** Key factors like competency assessment for staff involved in insertion and care of devices, and strict adherence to preventive bundles of care remain a challenge.

**Disclosure of Interest:** None declared

#### P188

#### SEASONAL INCIDENCE TRENDS OF SURGICAL SITE INFECTION - THE RESULT OF ACTIVE SURVEILLANCE PROGRAM OF POLISH SOCIETY OF HOSPITAL INFECTIONS

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**Introduction:** Surgical site infections (SSI) surveillance and registration are necessary to determine the epidemiological situation and to launch effective preventive strategies. European Centre for Disease Control and Prevention (ECDC) HAI-Net SSI program recommends the registration of SSI after selected surgical procedures for a period of at least three months.

**Objectives:** The aim of the study was to analyze the incidence trends for SSI registered as part of the active surveillance program run by Polish Society of Hospital Infections in accordance with the ECDC HAI-Net SSI protocol.

**Methods:** Definitions, infections detection criteria and registration forms in the Polish version were developed on the basis of the ECDC protocol.

SSI registration was carried out using the active method in various types of surgical procedures. In the years 2013-2018 eight hospitals participated in the program, for the period not shorter than one year.

**Results:** The study involved 33467 patients undergoing surgery (number of operations), in which 477 cases of SSI were registered. Most of the SSI cases form of SSI was not given. The average incidence was 1.4% and ranged from 1.1% to 3.3% depending on the type of surgery. Incidence rates were significantly different depending on the month of

infection detection. The highest rates were recorded in the winter months (December, January) and summer (June, July, August) in which fewer operations were performed than in other periods. No seasonality was observed for the distribution of etiological factors, among which Gram-negative rods from the *Enterobacteriaceae* were dominant (24%).

**Conclusion:** The study has certain limitations. They are for example a small number of hospitals, lack of effective post-discharge surveillance or classification based on the systems, not specific operating procedures chosen for analysis. However, observation of the seasonally significant variability of incidence has practical implications. Firstly, the need for detailed control and validation of SSI prevention procedures during winter and summer holidays of staff. Secondly, the need of continuous targeted surveillance longer than three months period as a necessary condition of obtaining reliable epidemiological data and effective infection prevention.

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#### P189

#### VALIDATION OF AN INSTRUMENT FOR POSTOPERATIVE SURVEILLANCE IN SURGICAL SITE INFECTION

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**Introduction:** Surgical site infection (SSI) represents the third cause of infection related to health care. Considering hospital discharges that are becoming more precocious, post-discharge surveillance is extremely necessary, since its failure to perform can lead to underreporting, making it difficult to prevention and control actions. There is a lack, until now, of tools that have been validated for the identification of potential cases of SSI during post-discharge surveillance.

**Objectives:** To create and validate an instrument for the post-discharge detection of potential cases of surgical site infection through post-discharge surveillance.

**Methods:** Methodological study, using psychometric analysis, for the elaboration and validation of an instrument for the post-discharge surveillance of surgical site infection.

**Results:** The instrument had coefficient of validity of total content equal to 0.87. In the criterion and construct validation, it was applied to a sample of 100 patients and compared to the medical and nursing physical examination to detect surgical site infection resulting in Cohen's kappa (0.83), Cronbach's alpha (0.87) and Comparative Fit Index (0.998). The sensitivity was 76.4%; specificity of 100%; negative predictive values of 92.5% and positive of 100%, and; accuracy of 94%.

**Conclusion:** The instrument was validated in the content, criteria and construct stages.

#### References

1. Berrios-Torres S, Umscheid C, Bratzler D, Leas B, Stone E, Kelz R et al. Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection, 2017. JAMA Surgery. 2017;152(8):784. DOI: <http://dx.doi.org/10.1001/jamasurg.2017.0904>
2. World Health Organization (WHO). Global Guidelines for the Prevention of Surgical Site Infection. [Internet]. 2016. Available from: <http://apps.who.int/iris/bitstream/10665/250680/1/9789241549882-eng.pdf?ua=1>
3. United States of America. Centers for Disease Control and Prevention. Procedure associated module: Surgical Site Infection. [Internet]. Atlanta; 2018. [cited 2017 Oct 25]. Available from: <https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf>
6. National Institute for Health and Clinical Excellence/NICE. Guideline for Preventing, Identifying and Managing Wound Infection. [Internet]. 2017 [cited 2017 Oct 25]; Available from: <https://www.nice.org.uk/guidance/CG74/chapter/1-Guidance#preoperative-phase>

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