Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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**Conclusion:** While the minimal temporal fluctuations in bacterial species abundance and AMR allele prevalence seen overall implies that the microbiome is fairly robust to treatment, we still observe acquisition of AMR alleles through time. This suggests that treatment may either encourage the dynamic movement of AMR alleles at the assembly level or select for bacterial species containing more resistance.

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**OP01.08 (550)**

Evaluation of Antibiotic Use in Inpatients at the Evangelical Medical Institute of Kimpese Hospital, Democratic Republic of Congo

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**Purpose:** The aim of study was to evaluate the use of Antibiotics at the Kimpese EMI hospital in Democratic Republic of Congo, in order to contribute to the fight against antibiotic resistance. On the one hand, they cure even the most severe infections, but on the other hand, they are at the base of the antibiotic resistance. This last, is a scourge of the hour because at the base of morbidity and mortality in many nations. Our research questions were: Is the use of antibiotics effective in EMI hospital? Are they part of the most used drugs? Are they prescribed without bacteriological proof?

**Methods & Materials:** This was a descriptive cross-sectional study of hospitalized patients, from 28 March to 7 June 2020. Information on socio-demographic characteristics, clinical and laboratory results and antibiotic use were recorded. The departments of surgery, gynaeco-obstetrics, internal medicine, ophthalmology, orthotraumatology and paediatrics were involved. The population was 1004 participants during the study period. The analysis was performed with STATA software version 14.1. 4 physicians were recruited to collect data using a questionnaire.

**Results:** Of drugs prescribed to hospitalized patients, with 1004, 53% were antibiotics, followed by antimalarials 10%. Their use was, respectively in Orthotraumatology 27.2%, Gynaeco-obstetrics 19.2%, Surgery 16.9%, Paediatric 16.5%, Internal Medicine 15.9% and in Ophthalmology 4.3%. Of the antibiotics prescribed, the Access group prescribed alone were prescribed for 43% of hospitalized patients and Watch for 32%. The most used antibiotics among the admitted patients were respectively: Penicillins 43.3%, Cephalosporins 33.3% and Lmidazoles 14.7%. They were indicated for antibiotic prophylaxis in surgery at 22.2%, trauma at 18.6%, antibiotic therapy in surgery at 6.4%, pneumonia at 5.9%, bone infection 5.2% and finally for gynecological pathology at 5%. Of the hospitalized patients, only 1/10th had a bacteriological examination performed.

**Conclusion:** This study allowed, to see the reality and effectiveness of antibiotic use and its preponderance over other drugs. Betalactams were the most prescribed. For a good number of patients, antibiotics were prescribed without any bacteriological evidence.

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**OP01.09 (1017)**

Extensively Drug-Resistant Salmonella enterica serovar Typhi in Pediatric population during CoVID-19 Pandemic

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**Purpose:** The Extensively Drug-resistant (XDR) Salmonella isolates exhibiting resistance to the first line and the second-line antibiotic options are presently a grave public health concern in Pakistan. Here, we report the first large-scale emergence and spread of an XDR S. Typhi in Peshawar, Pakistan during Coronavirus disease (CoVID-19) pandemic. Initially XDR typhoid cases were reported during post rainy season but now the disease has become endemic during winter months.

**Methods & Materials:** From December 2020 till January 2021, we reported the high level of emerging resistance to different groups of antibiotics among Salmonella isolates from paediatric age group with enteric fever. A total of 548 blood cultures from symptomatic patients were submitted to Microbiology section of Pathology Laboratory, Rehman Medical Institute, Peshawar. All samples were incubated in BACTEC 9240 and processed according to standard guidelines (sub-cultured on Blood and MacConkey’s agar and non-lactose fermenting colonies were biochemically tested for Salmonella typhi and confirmed by Salmonella specific anti-sera. Demographic data including age, gender, address and clinical features were also recorded.

**Results:** Salmonella Typhi was isolated in 71 and 548 blood samples during December 2020 and January 2021, out of which 66 (92.9%) and 5% (7%) were MDR, respectively. All isolates revealed high level of resistance to co-trimazazole (93%) and complete resistance to chloramphenicol (100%), ampicillin (100%), ciprofloxacin (100%), ceftriaxone (100%), cefixime (100%). All XDR typhoid isolates were sensitive to azithromycin and carbapenems. The children under 15 years’ age (88%) has a significantly high prevalence among children as compared to adults (p=0.0016), males (76%) were affected more than females (24%).

**Conclusion:** The emergence of XDR S. typhi with high level of resistance is quite alarming. With inadequate treatments options, the present situation calls for immediate effective preventive measures including food and water safety, improved sanitation, public awareness sessions and typhoid vaccination campaigns.

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**PS01.01 (113)**

Molecular Typing of Multidrug-Resistant Staphylococcus aureus Isolated from Livestock Veterinarians and Farmers

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