The objective of our study is to assess the prevalence of infectious perinatal risk situations in the delivery maternity room in Souissi hospital in Rabat, Morocco.

Materials and Methods A prospective study about all infants born in maternity Souissi (Rabat) during one year: from first January to 31 December 2010. We included all newborns symptomatic or not at birth and whose mothers have at least one infectious case histories from the following: rupture of membrane ≥ 12 hours, chorioamnionitis, urinary tract infection and/or genital, fever ≥ 38°C before or in early labor.

Results On a total of 14792 live births, 1602 newborns were prone to a risky infection (10.83%). Prolonged rupture of membranes showed 1341 cases including 59 newborns were premature. The duration of the rupture was between 12 and 24 hours in 44.30% of cases, between 24 and 48 hours in 44, 37% of cases and more than 48 hours in 11.33% of cases. On 133 cases of chorioamnionitis (10.67%) 129 newborns were full-term and 7 were premature.

The obstetric decision was caesarean section delivery in 25.78% of cases. 4.74% of newborns had respiratory distress with a single case of death in the first hours of life. 4.50% were preterm and 8.86% were hypotrophy. Hospitalization was required from the outset in 1059 cases among which 133 were hospitalized. For other patients an inflammatory report was requested. The were followed as outpatients.

Abstracts

**900** NUTRITION MEDICINAL PLANTS FOR MANAGMENT OF CHILDREN DISEASES IN UGANDA: CASE STUDY OF NAMUNGAILE SUB COUNTY, IGANGA DISTRICT

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Nutrition deficiency is a key determinant of an immune deficient body state. There is scientific evidence that plant species effective in disease management confers both nutritional and medicinal benefits to the people using them. The main objective of this study was to identify the plants known to be used in children diseases management and determine their macronutrient and micronutrient composition. To achieve the first objective, a survey was conducted between July 2009 and February 2010 using semi-structured interviews and questionnaires; focused group discussions, participant observation and field visits. Nutrition composition of plants used was determined using standard laboratory methods in the nutrition laboratory in the department of Food Science and Technology, Makerere University. A total of 67 species were documented as plants used in the disease management among children. These species belonged to 38 families and 35 genera. Faboideae (5), Asteraceae (4) and Mimosaceae (4) families had the most number of plant species. Herbs (37.7%) were the most used plant life forms followed by (34.4%) in disease management among the children. Leaves (58.1%) were the most used plant parts. These plant species are mainly cultivated (42.6%). The plants were mainly boiling. Most plant species were used in management of malaria, anemia and diarrhoea among children. The six selected plants, Acacia seyal, Albizia coriaria, Dicliptera laxata, Kalanchoe densiflora, Persea americana and Vernonia amygdalina that were analysed in this study all had macronutrients and micronutrients except phosphorus and sodium. There is a great potential of nutrition supplements using plants in children diseases management.

**901** IS THERE ANY DIFFERENCE BETWEEN THE SYMPTOMATOLOGY AND CLINICAL FINDINGS OF VIRAL AGENTS THAT CAUSED DEHYDRATION?

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Background and Aims Acute gastroenteritis is responsible for dehydration in many children. The viruses are considered the main agents of gastroenteritis, and these are included by rotavirus, norovirus, adenovirus. Evaluation of the symptoms, clinical findings and hospitalization requirements were aimed in cases of dehydration.

Methods The distribution of age, symptoms, clinical and laboratory findings and hospitalization requirements of viral gastroenteritis cases who have moderate to severe dehydration were evaluated retrospectively. A total of 156 patients with moderate to severe dehydration caused by acute viral gastroenteritis were evaluated. Patients were between 3 months to 16 years of age (mean: 38.7 months). Rotavirus, Norovirus and Adenovirus were detected by immunochromatographic method, as the causes of gastroenteritis.

Results Dehydration were detected in 156 patients with acute gastroenteritis (156/278), which included patients with Rotavirus (48%), Norovirus (41%) and Adenovirus (13.5%), respectively. Norovirus was mostly detected (51.8%) in the first 24 months of age, however, Rotavirus was mostly detected in >24 months of age (61.3%). The common symptoms of all patients were vomiting, diarrhea, abdominal pain and malaise, although fever was seen mostly the cases with Rotavirus. A total of 59 patients were hospitalized, they were Rotavirus cases mostly (n=35, 59.3%).

Conclusions The main agents of acute gastroenteritis which caused in dehydration were Norovirus and Rotavirus in our patients. Norovirus was the mostly detected agent in infants and young children who were < 24 months of age. Rotavirus was detected in the most of hospitalized patients, it had caused to most of the severe symptoms.

**902** ANTIMICROBIAL UTILIZATION PATTERN IN RESPIRATORY TRACT INFECTIONS AMONG PEDIATRIC POPULATION IN AJMAN, UAE

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Background and Aims Respiratory tract infection (RTI) among children is a leading cause of sickness among school children and parental absenteeism from work. It is associated with hospitalization and significant morbidity. Antimicrobials play an integral role in management of RTIs but irrational use is too common. Hence, this study aimed to determine the prescribing patterns of antimicrobials among children attending the outpatient department (OPD) of pediatrics in GMC Hospital, Ajman.

Methods A cross-sectional drug utilization study was conducted using the prescriptions from the medical records of patients (aged 0–12 years) diagnosed with RTIs during January 2011 at GMC Hospital, Ajman. The demographic data, clinical diagnosis and antibiotic prescription were analyzed using descriptive statistics (SPSS 19).

Results A total of 488 patients (20.2%) presented with RTI to the OPD of pediatrics. Male to female ratio was 1.24. Majority of the patients were Egyptians followed by Emiratis. Majority of children 225 (46%) were between 1–5 years of age. Combination of upper and lower respiratory tract infections (URTI & LRTI) accounted for 187(38%), URTI 208(23%), and LRTI 93(19%). The most frequently prescribed drug categories for treatment of RTIs was antimicrobial
agents followed by symptomatic medications of which decongestants were the most prevalent. On average, the number of drugs per prescription was 3.86. The combination of amoxicillin + clavulanate and azithromycin were the most prescribed antimicrobials.

Conclusions Overall, prescriptions of antimicrobials among pediat-

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903 MULTIDRUG RESISTANT CLONES OF CA-MRSA ISOLATED FROM CHINESE CHILDREN AND THE RESISTANCE DETERMINANTS TO CLINDAMYCIN AND MUPIROCIN doi:10.1136/archdischild-2012-302724.0903

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This study aims to correlate the multidrug resistance (MDR) and ST clones of community-associated methicillin-resistant Staphylo-
lococcus aureus (CA-MRSA), to identify the genes responsible for clindamycin and mupirocin resistance in Staphylococcus aureus (SA) isolated from pediatric hospitals of Mainland China. Up to 485 SA isolates were collected. The findings indicated that in comparison with community-associated methicillin-susceptible S. aureus (CA-MSSA), the resistance rates of CA-MRSA to ciprofloxacin, chloramphenicol, gentamicin and tetracycline were higher. The resistance rates to clindamycin and erythromycin were higher (92.0% and 85.9%, respectively) in CA-MRSA. The MDR rates were 49.6%, 100% and 14% in CA-MRSA, HA-MRSA and CA-MSSA isolates, respectively. Five of seven ST (sequence typing) clones in CA-MRSA, namely ST59, ST338, ST45, ST910 and ST965, had MDR rates of more than 50% (67.9%, 87.5%, 100%, 50% and 83.3%, respectively). The co-remote phenotype of macrolide-lincosamide-streptogramin B (MLSb) resistance (69%) and the emrB gene (58.1%) predominated among them. The resistant rate to mupirocin was 2.3%, and plasmids carrying the mupA gene varied in size between 23 and 54.2 kb in 6 strains with high-level resistance by Southern blot. The present study showed that the resistance to non-β-lactam antimicrobial agents, especially to clindamycin, was high in CA-MRSA isolated from Chinese children and the profile of resistance was related to clonal type.

904 COMPARISON OF CLINICAL AND MICROBIOLOGICAL FEATURES OF VULVOVAGINITIS IN PREPUBERTAL AND PUBERTAL GIRLS doi:10.1136/archdischild-2012-302724.0904

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Objective Vulvovaginitis is the most common gynecological problem of childhood. The aim of the study was to determine and compare clinical and microbiological features of vulvovaginitis in prepubertal and adolescent girls.

Material and Methods In this retrospective study, the records of patients who were diagnosed with vulvovaginitis between January 2005 and December 2010 in the Pediatric outpatient clinic at Fatih University Hospital were retrieved. Information regarding age, symptoms, history of antibiotic use within 1 month prior to presentation, findings on urinalysis, serum antistreptolysin-O levels, and results of urine/vaginal cultures was collected.

Results The records of 112 patients were evaluated, 72 of which were prepubertal (64.2%) and 40 were pubertal (35.7%) at the time of diagnosis. Thirty-eight prepubertal patients (52.7%) had a positive result on vaginal culture, the most commonly encountered microorganism being group A beta hemolytic streptococcus (15.2%). Culture positivity rate in the pubertal group was 47.5% (19 patients), with Candida albicans being the most frequently isolated microorganism (27.5%).

Conclusion The etiopathogenesis and culture results differ between prepubertal and adolescent girls with vulvovaginitis, which should be taken into consideration in the treatment approach of this disorder.

905 INCIDENCE OF BRONCHIOLITIS HOSPITALIZATIONS IN THE PEDIATRIC TEACHING HOSPITAL ALCIDES CARNEIRO - PETRÓPOLIS - RIO DE JANEIRO - BRAZIL doi:10.1136/archdischild-2012-302724.0905

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Background and Aims The Bronchiolitis is the most common cause of hospitalization among infants under 6 months in developed countries and less than 1 year in developing countries. Respiratory syncytial virus is the main etiologic agent responsible for 60–80% of cases during the months of autumn and winter. The objective of this study was to describe the incidence of bronchiolitis in our country compared with the international literature.

Methods A transversal descriptive study of patients admitted to the pediatric ward of the Teaching Hospital Alcides Carneiro - Petrópolis - RJ in the period June 2008 to June 2010 with clinical and radiological diagnosis of bronchiolitis. Excluding cases associated with underlying disease. We studied seasonal distribution, gender, age distribution, the most prevalent complications and hospital stay.

Results The bronchiolitis accounted for 5% of total admissions during the study period. Of these, 63% were male and mean age of 5.4 months in hospital stay of 7.5 days. Complications occurred in 48% of cases: pneumonia, atelectasis, 78.4% and 3.2%. For fall-winter seasonality in 74% and 22.3% incidence in the month of May.

Conclusions This study demonstrates the seasonal nature and prevalence of males, age range and prevalence of pneumonia as the most frequent complication. The percentage of hospitalizations in this study in relation to the total number of hospitalizations is referenced by the above literature.

906 FUNCTIONAL ANTIBODY ASSAY: HOW USEFUL IS IT IN RECURRENT RESPIRATORY TRACT INFECTIONS? doi:10.1136/archdischild-2012-302724.0906

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Background and Aim Recurrent respiratory tract infection (RTI) is a frequent presenting complaint in the general paediatric clinic. Children are often tested to screen for possible underlying immuno-deficiency and Cystic Fibrosis. We aim to evaluate the indications for performing functional antibody assay (FAA) and how the results affected our clinical management.

Methods We retrospectively studied children who had FAA (Haemophilus, Pneumococcus, and Tetanus) sent over a 1-year period in our district general hospital. Clinical records were examined for patient’s characteristics and FAA results.

Results Between September 2010 and September 2011, 48 patients had FAA performed. Ages ranged between 1 and 18, with 6% under 13 months old, and 85% under 8 years old. In 77%, FAA was performed because of recurrent RTI; 10% because of other recurrent infections; and in 13% no indication was documented. 55% of