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test kits). Socio demographic data was obtained using a study questionnaire.

Results: Out of 536 admissions, 187 (34.9%) had acute diarrheal disease and 148 stools tested for rotavirus. Of the 148 specimens tested, 111 (75.0%) were positive for rotavirus antigen and 37 (25.0%) were negative. Ninety (81.1%) of the positive cases, were aged 12 months and below. There was no significant difference in the age specific prevalence rates ($\chi^2 = 0.50$, $p = 0.48$).

The mode of feeding, and other identifiable possible risk factors like socio economic class, maternal education, level of hygiene practiced by the mother, method of excreta disposal, water source, did not appear to have a significant effect on the risk of rotavirus infection.

There was a well-defined, period of peak transmission occurring between the third week of January and second week of February 2006.

Mortality rate for acute diarrhea over the study period was 7.5%, with 50.0% of the stools of those who died being positive for rotavirus.

One hundred and twenty (81.1%) of the patients had complete routine vaccination for age, 16(10.8%) had incomplete vaccination, while 12(8.1%) did not have available records.

Conclusion: Rotavirus remains a leading cause of diarrhea disease in children in the Gambia, with significantly high mortality in the under 5 year old children during periods of high transmission. Because of the high vaccination coverage noted among the children studied, introduction of vaccines against rotavirus may be an effective control measure.

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The role of viruses in the aetiology of IRA in Peruvian children

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Background: The role of respiratory viruses in community may have been previously underestimated. We aimed to study the incidence and clinical characteristics of acute respiratory infections (IRA) in children adding PCR to routine conventional laboratory tests.

Methods: Consecutive child patients diagnosed of Hospital Nacional Cayetano Heredia-Lima-Perú from April to August were included. Nasopharyngeal swabs were processed for study of respiratory viruses through antigen detection by indirect immunofluorescence assay and detection of nucleic acids by two independent multiplex RT-PCR

assays. According to the aetiology, patients were categorized in 4 groups: group 1, only virus detected; group 2, only bacteria detected and group 3, viral and bacterial

Results: Of 200 patients diagnosed with IRA, 200 had nasopharyngeal swabs available and were included in this study. Aetiology was established in 200 patients: group 1, n=57 (28.5%); group 2, n= 23 (11.5%); group 3, n= 25(12.5%). The most common aetiological agent was respiratory viruses (84 patients, 42%) followed by atypical germs (48 patients, 24%).

Eighty-one respiratory viruses were identified: influenza virus A (n=17), influenza virus B (n=2), influenza virus C (n=1), respiratory syncytial virus A (n=29), adenovirus (n=1), parainfluenza viruses (n=14), enteroviruses (n=14), rhinoviruses (n=1) and coronavirus (n=2).

There were eleven patients coinfecting with respiratory virus. Forty and five atypical germs were identified: 21 *Chlamydia pneumoniae* (n= 21) and *Mycoplasma pneumoniae* (n=24). There were sixteen patients coinfecting by both atypical germs. Immunofluorescence 41 and PCR 81. For the viruses that could be diagnosed with conventional methods, the RT-PCR was most sensitivity and specificity than Immunofluorescence.

Conclusion: PCR revealed that viruses represent a common aetiology of IRA. There is an urgent need to reconsider routine laboratory tests for an adequate diagnosis of respiratory viruses, as clinical characteristics are unable to reliably distinguish viral from bacterial aetiology.

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Clinical and epidemiology characterization of children hospitalized with influenza A H1N1 (FLU AH1N1) during the first wave of 2009 outbreak, Santiago, Chile

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Background: In Chile flu AH1N1 affected mainly children between 5-14 years old (4500/100,000 pop) with highest hospitalization in children)5 years (90,8/100,000 pop).

Objectives were to describe epidemiological, clinical, virological and laboratory findings and to determine risk factors for severe disease in pediatric patients.

Methods: Descriptive study of hospitalized children with confirmed flu AH1N1. We studied the presence of the virus in biological samples (respiratory secretions, blood and urine) using real-time RT-PCR and viral culture, at admission and at 3rd and 5th days of treatment with oseltamivir. Viral load from respiratory samples was standardized by copies/100,000 cells.

Results: 20 children were hospitalized with flu AH1N1. Twelve girls (60%), mean age 2.9 years (1m-16y). Most