## OC30 DESCRIPTIVE EPIDEMIOLOGY OF INFLUENZA IN THE PAEDIATRIC POPULATION IN IRELAND, 2009 – 2018

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10.1136/archdischild-2019-epa.29

In Ireland, influenza places a considerable burden on the health system, with the highest disease occurrence among young children and the elderly. Trivalent influenza vaccines are recommended for use in risk groups in Ireland each season. In this study, we aim to support decisions regarding alternative vaccination strategies, such as the use of quadrivalent vaccines and/or universal vaccination of children.

We describe the burden of influenza among cases aged 0 to 14 years in Ireland from 2009/2010 to 2017/2018 influenza seasons, using data on clinical influenza-like illness (ILI) GP consultations reported through the sentinel GP network and reported laboratory confirmed severe influenza cases from Ireland's Computerised Infectious Disease Reporting System.

The highest GP ILI consultation rates in children were observed during seasons when influenza A(H1N1)pdm09 predominated (460/100,000 during the 2009 pandemic and 206/100,000 in 2010/2011) and during influenza B/lineage vaccine mismatched seasons (118/100,000 in 2017/2018). The 2015/2016 season was also an influenza B/lineage mismatched season, with both influenza A(H1N1)pdm09 and B predominating, with a peak ILI rate of 112/100,000. Since 2009, 3520 hospitalisations, 166 critical care admissions and 39 influenza-associated deaths were reported in children with laboratory-confirmed influenza. The total number of children hospitalised with confirmed influenza has ranged from 66 (7/100,000) in 2011/2012 when influenza A (H3N2) predominated, to 1104 (110/100,000) in the 2017/2018 season, an influenza B/lineage vaccine mismatched season. The age-specific rates for hospitalised paediatric influenza cases were highest in those aged 0–4 years, ranging from 16/100,000 in 2011/2012 to 197/100000 in 2017/2018. The 2017/2018 influenza season was a severe prolonged season, with paediatric influenza hospitalisations two times greater than the 2009 influenza pandemic. Of children in risk groups, hospitalised with influenza, during the 2016/2017 and 2017/2018 seasons, 86–88% of cases were unvaccinated.

Elevated sentinel GP ILI consultation rates, influenza hospitalisation rates, and critical care admissions were observed during seasons when influenza A(H1N1)pdm09 predominated and also during influenza B/lineage vaccine mismatched seasons. Additional strategies are needed to reduce the morbidity and mortality associated with influenza in risk groups, improve vaccine uptake in at-risk children and to protect healthy children currently not eligible for influenza vaccination. The impact of influenza on the Irish population suggests that quadrivalent vaccines and/or universal childhood influenza vaccination could be considered, as in other European Member States.

## OC31 THE EFFECT OF BREASTFEEDING ON THE RATE OF INFECTIONS IN THE THE FIRST 2 YEARS OF LIFE

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10.1136/archdischild-2019-epa.30

**Background and aims** The aim of our study was to investigate the effect of duration of exclusive breastfeeding (EBF) and duration of breastfeeding (BF) on the rate of infections during the first 2 years of life.

**Methods** The study group consisted of healthy infants who admitted to the outpatient Healthy Child Clinics of Istanbul University, Cerrahpasa Medical Faculty for their routine control between February 2016 and May 2017. Files of the patients were reviewed retrospectively with regard to breastfeeding and infection history such as upper and lower respiratory tract infections(URTI, LRTI), acute gastroenteritis (AGE), urinary tract infection (UTI) and acute otitis media (AOM) during the first 2 years of life.

**Results** A total of 200 infants (91/109:male/female) with a birth weight and length of 3286.2±446.9 gr, 50.4±2.4 cm, respectively and who were born at term were enrolled. The rate of vaginal and cesarian delivery was 72.5% and 27.5%, respectively. The mean duration of EBF and total duration of BF were 4.2±2.8 and 11.6 ±5.3 months, respectively. In those without any infection (42.5%), duration of EBF and total duration of BF were 5.9±0.4 and 13.4±4.6 months, respectively while in those with 1 infection (29.5%) it was 46 ±3.3 and 11.8±4.6 months and with ≥2 infections (28%), it was 1.3±1.9 and 8.7±5.9 months, respectively. This difference between each group was stastistically significant ($p<0.001$). There was no difference in the rate of infections with regard to type of delivery, gender, anthropometric values at birth, maternal educational status and maternal age. Most of the infections were URTI (52.5%) followed by LRTI (14.5%), AGE (12.2%), UTI (11.7%) and AOM (8.9%).

**Conclusions** Epidemiological data support the benefits of breast-feeding in preventing gastrointestinal and respiratory infections in both developing and developed countries. Our study also showed that increased duration of exclusive breastfeeding and increased duration of breastfeeding in general were associated with lower infection rate in infants in the first 2 years of life. WHO recommends exclusive breastfeeding up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond. Therefore, lactating mothers should be encouraged to breastfeed their infants and it is our duty to raise awareness on breastfeeding for its encouragement.

## OC32 AWARENESS OF SIDS RISK FACTORS IN IRISH MOTHERS-A QUESTIONNAIRE BASED STUDY

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10.1136/archdischild-2019-epa.31

**Background** SIDS is the sudden unexpected and unexplained death of an infant under 1 year of age. Studies so far, have

Arch Dis Child: first published as 10.1136/archdischild-2019-epa.30 on 12 June 2019. Downloaded from http://adc.bmj.com/ on August 20, 2022 at Istanbul Universitesi. Protected by copyright.