

clinicians in line with Department of Health QIPP (Quality, Innovation, Productivity and Prevention) programme.

**Aims** To improve the quality of referrals and reduce inappropriate referrals to admissions unit and outpatients by educating GPs and nurses to be more competent and confident in management of children.

**Methods** 10 Masterclasses were run by 8 paediatric consultants/PIP over a 6 week period in 2011. 125 GPs, 92 nurses (17 nurse practitioners, 28 Practice Nurses, 9 community nurses, 24 health visitors) and 29 others (triage, student nurses) attended these sessions. 8 topics including convulsions, gastro enteritis, respiratory infections and rashes covered the top ten non-elective admissions and outpatient referrals to hospital identified in survey.

**Results** Feedback showed that participants preferred small informal groups with an interactive format helpful for learning. 80% of 242 participants who completed evaluation forms found the Master-classes useful or extremely useful.

**Conclusions** Referral data for acute hospital admissions and outpatients for individual GPs before and after Masterclasses is currently being audited. A reduction of 5–10% in acute and outpatient referrals by GPs is expected by 2012. We aim to conduct paediatric masterclasses to include all primary care clinicians in the region.

#### 1690 PREVALENCE OF FEBRILE SEIZURES IN CHILDREN ADMITTED TO TEACHING PUBLIC HOSPITAL

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<sup>1</sup>A Veiga, <sup>2</sup>EQ Veiga, <sup>1</sup>NV Moliterno, <sup>2</sup>FM Moliterno, <sup>1</sup>SS Cordeiro, <sup>1</sup>SA Nogueira, <sup>3</sup>A Siqueira, <sup>3</sup>I Cordebel. <sup>1</sup>Paediatrics; <sup>2</sup>Faculdade de Medicina de Petrópolis; <sup>3</sup>Hospital Alcides Carneiro, Petrópolis, Brazil

**Background and Aims** Febrile seizure is the manifestation neuro-pediatric more frequent, occurring in 2% and 5% in childhood. It occurs in children between 6 months and 5 years, associated with fever in the absence of intracranial infection or other cause neurological defined and not preceded by afebrile seizures. It is usually generalized tonic-clonic, short, single, early and not accompanied by neurological phenomena after the crisis. The objective of this study was identify the prevalence of Febrile Convulsion in patients hospitalized for febrile seizures, in January 2006 to December 2010.

**Methods** Cross-sectional study of patients admitted to the pediatric ward in a teaching hospital in the State of Rio de Janeiro. We analyzed 174 patients admitted with seizures of any etiology.

**Results** Febrile seizures accounted for 36% of 174 cases of seizures and 1.11% of 5667 cases admitted in the five years of the study. The mean age was 2.2 years, ranging in age from 6 months and a maximum of six years. The mean hospital stay was 5.73 days. Males accounted for 68.25% of cases. Regarding the focus of fever, respiratory tract accounted for nearly 50% of cases being diagnosed with 23.76% and 19.04% of upper respiratory infections to pneumonia.

**Conclusion** This study confirms the prevalence of the epidemiological literature, predominantly male (2:1), average age between 6 months and 5 years and the respiratory tract as the main focus for febrile seizures. It is imperative that further studies to evaluate diagnosis, treatment and follow up cases.

#### 1691 THE USE OF FATTY ACID SUPPLEMENTATION IN THE TREATMENT OF ADHD- IS THERE ANY EVIDENCE?

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<sup>1</sup>S Damodaran, <sup>3</sup>G Erumbala, <sup>4</sup>D Abraham, <sup>1</sup>L Doddamani. <sup>1</sup>Paediatrics, James Paget Hospital, Great Yarmouth; <sup>2</sup>PICU, Addenbrookes Hospital, Cambridge; <sup>3</sup>Paediatrics, Milton Keynes General Hospital NHS Foundation Trust, Milton Keynes; <sup>4</sup>Neonatal Unit, Birmingham Women's Hospital, Birmingham, UK

Attention deficit hyperactivity disorder (ADHD) is the most common behavioural disorder in children. The mainstay of treatment is

stimulant drugs. There is significant interest in the role of omega 3 fatty acids in ameliorating ADHD symptoms. We reviewed the evidence from available randomized controlled trials.

**Clinical question** In a child with ADHD (patient), will supplementation with LCPUFA (omega3) (intervention) improve symptoms (outcome)?

**Sources** Pubmed, Sumsearch, Ovid and Cochrane library. 7 randomised control trials were analysed.

**Summary** There was no uniformity in terms of the dose or duration of fatty acids. The criteria used for measuring outcome varied significantly. In the largest study, Sinn et al compared omega3 with omega3 and multivitamins and placebo. This study involved the longest treatment period. There was significant improvement in ability to switch and control attention. But, there was no improvement in any other cognitive measures. Richardson et al and Belanger et al reported statistically significant improvements in symptoms with higher doses of omega 3. However both used small sample size. The former study lacked robust inclusion criteria. Of the studies that used low dose regime, Gustafson et al demonstrated significant improvement in cognition, inattention and opposition while Voigt et al failed to show any. Interestingly, Hirayama et al showed improvement in the placebo group.

The current available evidence is not sufficient to support the use of omega 3 fatty acid in the treatment of ADHD. More studies need to be conducted in the future using objective outcome criteria and good sample size.

#### 1692 THE AETIOLOGY OF ACUTE ABDOMINAL PAIN IN CHILDREN 2–12 YEARS OF AGE

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N Kandamany, MB O'Neill. Mayo General Hospital, Castlebar, Ireland

**Background and Aims** Abdominal pain is common in childhood. This study evaluated abdominal pain in children aged 2–12 to determine the frequency of aetiologies.

**Methods** Patients between 2 and 12 years presenting to the Emergency Department over a 5 month period, with abdominal pain were included. Patients with chronic constipation, previous abdominal pain and previous gastrointestinal surgery were excluded. Data was collected prospectively utilising patient's charts and a pretested proforma on abdominal pain which contained diagnostic tips and prompts. Demographic data, referral source, symptom complex, examination findings, and diagnoses were noted. Patients with a diagnosis of constipation were followed up via telephone to confirm accuracy of diagnosis.

**Results** One hundred and thirteen patients were assessed. Aetiologies of abdominal pain were appendicitis 26 (23%), constipation 23 (20%), gastroenteritis 18 (16.5%), mesenteric adenitis 15 (13%), non specific abdominal pain (viral syndrome) 11 (10%), urinary tract infection 7 (6%), pneumonia 6 (5%), gastritis 5 (4.4%), acute asthma 2 (2%). Eighty four (75%) patients were referred by their family doctor. Patients diagnosed with constipation were contacted by telephone to confirm the diagnosis, with 18 (78%) agreeing.

**Conclusion** This study outlines the aetiology of abdominal pain in a paediatric population, three quarters of whom had been assessed by their family doctors prior to referral. Non gastrointestinal aetiologies need to be considered in the assessment.

#### 1693 PRIMARY CARE GIVERS OF INFANTS ON HOME OXYGEN

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<sup>1</sup>T Nzirawa, <sup>2</sup>M Ahmed, <sup>2</sup>A Haque. <sup>1</sup>Neonatal Medicine; <sup>2</sup>Paediatrics, Queen's University Hospital, London, UK

**Method** This observational survey was prospectively conducted between Jan 2010 and April 2011. Precipitants (parents or other primary care givers) of infants on home oxygen were identified through the Neonatal Outreach Referral Records. A questionnaire of 22 items was sent out to all eligible participants.

**Results** 18 parents/carers participated in the survey. The feedback showed that having home oxygen affected their family and social life. Support was given by health care professional regarding use of the home oxygen and safety advice in emergencies, however some of the issues identified were out of the control of the health professionals.

**Conclusions** Awareness of the psychological impact of discharging infants on home oxygen to the parents should be important to all health professionals involved. A standard training for the Neonatal outreach nurses and Children home Care Team should be considered in assessment of mild depression or identifying triggers of stress prior to discharge and within the community.

#### 1694 ALLERGY DISEASES IN CHILDHOOD AND GENERAL PEDIATRICIAN

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T Jakupi. *Pediatric Primary Healthcare Office, Tetovo, FYR Macedonia*

**Aim** To confirm the role of the general pediatrician in establishing the early diagnosis of allergy diseases and avoid the complications.

**Material and Methods** Our study is prospective for the period January 2010 - December 2011. We found out that 85 children, 39 male and 46 female, from 0–18 years old were with any kind of allergy illness. The children were divided in three groups from (0–6, 7–14, 15–15 years old). The procedures that we used to establish the diagnosis of Allergy Diseases were simple: Complete anamnesa, Questionnaires, Keeping a diary of the symptoms, Completely examination. With the help of these procedures we put initial diagnosis and confirmed the same during the skin allergy tests.

**Results** During this period we made skin allergy tests at 159 children. At 83 children in 2010, 76 children in 2011. From them 68 were with some allergy diseases in 2010 and 55 in 2011. With asthma were (51%) of children, with rhinitis allergy (12%); dermatitis allergy (13%), vomitus and abdominal colic 2.4%, laryngitis allergy (1.2%), conjunctivitis allergy (1.2%). While in 2011 we had 28% children with asthma, 18% with rhinitis allergy, 18% dermatitis allergy and urticaria, 1.3% laryngitis allergy and 1.3% conjunctivitis allergy. At the last we began with the adequate therapy.

**Conclusion** Thanks to our work we established the right diagnosis very soon, and we managed to avoid the complications which could be fatal for the child's growth.

#### 1695 MOTHERS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND NEONATAL LUPUS. WHAT YOU NEED TO KNOW. A PRESENTATION OF 5 CASES

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<sup>1</sup>M Trabazo del Castillo, <sup>2</sup>J Martínez-Baylach, <sup>3</sup>B Flinkenstein, <sup>4</sup>H Galdós, <sup>5</sup>C Herrera, <sup>6</sup>G Sais. *<sup>1</sup>Hospital de Mataró; <sup>2</sup>CAP Círcer-Molins, Consorci Sanitari del Maresme, Mataró, Spain*

**Aim** Neonatal lupus (NL) is a rare disease (1/12000–1/20000 newborns). It appears in the neonatal period of newborns of mothers with systemic lupus erythematosus (SLE) or other connective tissue diseases. It's caused by the transfer of antibodies (Anti-Ro/Anti-La) from the mother to the fetus through the placenta. We recall the main features of the NL and the management of the child who have a mother with SLE.

**Methods** We present 5 cases of mother-child diagnosed with SLE or NL. Four cases corresponds to mothers diagnosed with SLE (two or them, with children diagnosed of NL), and the other case is a NL

with an asymptomatic mother without the diagnosis of SLE until this moment.

**Results** Two or the four mothers diagnosed with SLE had children with NL (one with dermatologic clinic and the other with cardiac symptoms). These two mothers presented antibodies (Anti-Ro/Anti-La). The other two mothers didn't present these antibodies, so they had healthy children.

The fifth case was a newborn with a healthy mother, who was diagnosed with NL with dermatological features. After this, the mother was studied and had Anti-Ro/Anti-La antibodies.

No child diagnosed of NL had blood or liver disorders.

**Conclusions** We should study the children of mothers with SLE, particularly those with positive Anti-Ro/Anti-La antibodies, with the purpose of diagnosis of NL (particularly dermatological, cardiac, haematological and liver features).

If we suspect NL in a child of an asymptomatic mother, the presence of Anti-Ro/Anti-La antibodies in the mother and the newborn should be studies to confirm the diagnosis.

#### 1696 SYSTEMATIC REVIEW OF ACTIVE SCHOOL TRANSPORT AND HEALTH RELATED OUTCOMES

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Z Yazdanpanahi, Z Molazem, S Ghadakpour. *Shiraz University of Medical Sciences, Nursing and Midwifery Collage, Shiraz, Iran*

**Background** Active commuting to school (walking or biking) may be an important opportunity for children to accumulate adequate physical activity for improved cardiovascular risk factors, enhanced bone health, and psychosocial well-being and also decreased rates of metabolic complications and cardiovascular disease in later life.

**Methods** This article presents the results of a systematic review of the association between active commuting to school and health related outcomes.

**Results** Researches shows that Childhood obesity and physical inactivity and sedentary life are increasing dramatically in worldwide. physical inactivity is closely linked to bone health, cardiovascular disease, fitness and psychological factors. Recent studies have pointed out positive effects of active commuting on physical inactivity, overweight, obesity, survivors of childhood cancer, particularly brain tumors and acute lymphoblastic leukemia also demonstrate reducing in metabolic complications and cardiovascular disease in later life.

**Conclusion** Physical inactivity is a risk behavior for cardiovascular and some metabolic disorder, also Active school transport (AST) may be an important and easy source of children's physical activity (PA). Schools can promote public health by educating, planning and encouraging physical activity among children.

#### 1697 PLAYING THE GAME: WORKING WITH YOUNG CHILDREN TO DEVELOP ASTHMA INTERVENTIONS

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<sup>1</sup>D Bird, <sup>2</sup>L Culley, <sup>3</sup>M Lakhanpaul, Management Interventions for Asthma (MIA) Research Team. *<sup>1</sup>Medical and Social Care Education, University of Leicester; <sup>2</sup>Health and Life Sciences, De Montfort University, Leicester; <sup>3</sup>General and Adolescent Unit, University College London, Institute of Child Health, London, UK*

**Background** Involving children in designing healthcare interventions is encouraged but challenging and often limited to teenagers. We conducted a feasibility study assessing three methods for prioritising asthma intervention components with children aged 6–12 yrs.

**Methods** Nineteen children prioritised 14 aspects of asthma management for intervention development using Diamond ranking (DR - equal ranks permitted), Standard Borda Ranking (SBR - no equal ranks permitted) and Budget Pie (BP - allocation of funds