

**Abstract 28 Table 1** The proportion of pupils (n=106) that selected 'Yes' on the questionnaire

	Before the Session (% of children)	After the Session (% of children)	Percentage Change (%)
Do you know how to choose healthy foods?	65	89	+24
Do you know how to read nutrition labels?	35	75	+40
Do you know what diabetes is?	60	86	+26

opportunity to engage with children, practice public speaking skills, and gain confidence.

**Conclusions** Overall, the feedback received was positive and encouraging. The results show the workshops have successfully engaged with pupils, creating an exciting environment to learn about nutrition. Ultimately, early encouragement of healthy lifestyle choices in childhood may be critical to the development of healthier long-term habits (Llargues et al., 2011). In conclusion, the Food for Thought Project could be an effective school-based intervention to help combat childhood obesity and other lifestyle diseases that may develop later in life.

### 30 MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN (MIS-C/PIMS): AN OVERVIEW

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**Background** Multisystem inflammatory syndrome in children (MIS-C) or Paediatric inflammatory multisystem syndrome is a newly emerged hyper-inflammatory syndrome that is associated with SARS-CoV-2 infection in the paediatric population.

**Objectives** We aim to identify commonly presented clinical features, imaging findings, laboratory findings, treatment modalities and clinical outcomes of MIS-C/PIMS. We also aim to compare Kawasaki Disease and MIS-C/PIMS for better identification and management of these patients.

**Methods** A systematic review was conducted from 1st December 2019 to 30th August 2020. Three medical databases (PubMed, Ovid Resources and the WHO COVID-19 database) were included in this study. Inclusion criteria were all observational studies, case reports or case series that reported data on MIS-C or PIMS.

**Results** We yielded 48 studies (N=1604) from 12 countries. Median age ranged from 2 to 19.9 years. 88% had positive SARS-CoV-2 PCR or serology tests. Reported clinical features include fever (100%), gastrointestinal symptoms (87%), rash (56%), conjunctivitis (48%) and shock (47%). ECHO abnormalities (N=471) were most commonly reported. Laboratory findings include elevated inflammatory markers (66%-95%), deranged LFTs (54%) and cardiac biomarkers (49%-55%). Common treatment choices: intravenous immunoglobulin (76%), steroids (59%) and aspirin (33%). ICU admission rate was 72% and mortality rate was 2%.

**Conclusions** MIS-C/PIMS is an immune-mediated complication associated with COVID-19. Clinical manifestation vary and majority presents with evidence of multiorgan dysfunction. Close monitoring and high level of care should be given to

suspected or confirmed cases. Supportive care remains the mainstay treatment. While manifestation of MIS-C/PIMS overlaps with KD, it is a distinct entity based on their differences in age distribution, geographical and racial variation, laboratory findings, associated features and clinical outcomes.

### 32 HIGH FLOW NASAL CANNULA OXYGEN USE IN A DISTRICT GENERAL HOSPITAL IN THE PRE-COVID ERA FROM OCTOBER 2019 TO APRIL 2020

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**Background** High Flow Nasal Cannula (HFNC) oxygen is used to deliver heated and humidified mixture of air and oxygen at a flow higher than the patient's inspiratory flow. It reduces respiratory distress and mouth dryness. The greater oxygen flow 'washes out' the end expiratory oxygen depilated gas, meaning with the next breath, the patient inhales more oxygen. This dead space wash out also reduces CO<sub>2</sub> rebreathing. Reductions in rates of intubation in infants with bronchiolitis have also been reported following introduction of HFNC therapy; however research remains limited within paediatrics and it has been used in patients with conditions, other than bronchiolitis. In our District General Hospital (DGH), we have a guideline for use of HFNC in patients with bronchiolitis but not for use in other respiratory disease. The use of HFNC for the latter group is at individual consultant discretion after discussion with Paediatric Intensive Care

**Objectives**

- What were the incidence, indication, demographics, duration and outcome of patients who received HFNC therapy on the Children's ward in Craigavon Hospital over a 6 month period from October 2019 to March 2020?
- When patients received HFNC therapy outside our current indication, were they discussed with PICU in terms of suitability to initiate or continue therapy in the children's ward?
- Was there a delay or perceived delay in escalation of treatment to tracheal intubation in those who had treatment failure on HFNC?

**Methods** This was a retrospective chart review. Patient demographics, indication, duration of treatment and outcome are recorded in a pre-designed proforma

SHSCT Research Governance team advised this is a service evaluation quality improvement which did not require ethics approval (Appendix 2).

**Treatment success** was defined as 'patient improving on HFNC with successful weaning of respiratory support.' **Treatment failure** was described as the 'patient deteriorating despite treatment and requiring admission to PICU'

Results are tabulated in XCEL format, analysed and conclusions drawn with recommendations

#### Results

- 28 children required HFNC therapy over a 6 month period with peak activity in November 2019
- Male to female ratio was 3.5:1
- Commonest indication for use (85% cases) was bronchiolitis
- Comorbidities were seen in 50% of the cases with commonest being prematurity
- All patients receiving HFNC outside agreed indications were appropriately discussed with PICU

- HFNC treatment success rate was 79%

**Conclusions** Our study showed that HFNC has been largely successful in managing patients on the general paediatric ward reducing admissions to Paediatric Intensive Care in 79% cases

Most common indication for its use remains Bronchiolitis recommendations and future implications

- To continue the collaborated approach when initiating HFNC therapy in a DGH particularly when indications are outside the current guidance.
- This observational study was undertaken in the 'Pre-COVID' period. This year the Royal College of Paediatrics have endorsed a guidance including indications and contraindications, assessment 1 hour post therapy to detect responders and treatment failures and rapid weaning pathway. We plan to undertake a prospective analysis of high flow nasal cannula oxygen use this winter and compare results.

### 34 UNDERSTANDING DISRUPTIVE BEHAVIOURS IN ADOLESCENTS LIVING WITH HIV – A CROSS-SECTIONAL STUDY FROM COASTAL SOUTH INDIA

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**Background** Perinatally infected neonates are surviving into adulthood with an impact on mental and emotional health. Attention deficit hyperactive disorder (ADHD) and Oppositional Defiant Disorder (ODD) are a few of the common disruptive behavioral disorders in childhood, which have been found to have a higher prevalence amongst HIV infected children.

**Objectives** The objectives of this study were to assess the proportion of ADHD and ODD in adolescents aged 10–19 years living with HIV/AIDS by using SNAP IV 26 Item Teacher and Parent Scale and to find the association between duration of treatment, CD4 count, stage of the disease and socio-demographic details with ADHD and ODD.

**Methods** 88 adolescents aged 10–19 years living with HIV/AIDS were included in the study. The Swanson, Nolan Pelham (SNAP-IV) scale was administered to the caretakers, and children were assessed for the proportion of ADHD/ODD. Association between those who scored positive on the questionnaire with a duration of treatment, CD4 count, stage of the disease, and socio-demographic variables was done using the chi-square test and unpaired t-test.

**Results** Our study population included 88 participants, out of whom 9 scored positive in the inattention subset resulting in a proportion of 10.2%. 5 participants had symptoms of hyperactivity/impulsivity resulting in a proportion of 5.6%, and 1 had combined symptoms with a proportion of 1.1%. 13 scored positive in the opposition/defiant subset resulting in a proportion of 14.7%. All the participants who scored positive for ADHD and ODD were observed to live in care-homes. No statistical significance was found between treatment duration, CD4 count, stage of the disease, socio-demographic variables, and ADHD/ODD.

**Conclusions** The proportion of ADHD and ODD in this study was found to be comparable to the general population. A holistic approach to improve the long-term health of these youth is needed to ensure that our success in achieving the

survival of HIV-infected children from infancy is maintained into adulthood.

### 36 OVERVIEW OF HEALTH NEEDS OF LOOKED AFTER CHILDREN: OBSERVATIONS FROM INITIAL HEALTH ASSESSMENT

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**Background** Looked after children and young people present with similar physical and mental health problems like their peers, but often to a greater degree. They often enter care with a worse level of health than their peers in part due to the impact of physical and emotional abuse and neglect.

The term looked after child means children and young people who are cared for by Government/local authority. In 2016/17 there were approximately 96,000 looked after children in the UK but the total number of looked after children in the UK has increased every year since 2010.<sup>1</sup> In England the majority of children (62%) were looked after due to abuse or neglect, whilst family dysfunction (15%) and acute family stress (9%) combined accounted for less than a quarter (March 2013).<sup>2</sup>

Aims of our study was to review healthcare needs as identified during initial health assessments of looked after children due to neglectful parenting and physical/emotional abuse.

**Objectives** Aims of our study was to review healthcare needs as identified during initial health assessments of looked after children due to neglectful parenting and physical/emotional abuse.

**Methods** Initial health assessment records of looked after children were collected from System one software in community Paediatric looked after children's clinics between 1st October 2018 to 31st March 2019. Unaccompanied asylum seeker children and children under 1 year were excluded.

Necessary permission was obtained from Lead Paediatrician for looked after children and ethical clearance was obtained from Trust ethical committee.

Microsoft Excel was used to collect and analyse data.

**Results** Total 40 children were included in the study and their initial health assessment report were analysed out of which 22 were male and 18 were females. There was history of parental neglect, and physical/emotional abuse in all of them.

40% (16/40) children had learning difficulty/developmental delay.

25% (10/40) were referred for assessment of autism spectrum disorder/attention deficit hyperactivity disorder and 20% had confirmed diagnosis.

35% children had associated mental/emotional problems including anxiety, attachment difficulties and emotional dysregulation.

Sleep problems (27.5%), Continence issues (10%) and Tooth decay (40%) were among other prominent health issues identified.

**Conclusions** Incidence of neurodevelopmental disorders (autism spectrum disorder/attention deficit hyperactivity disorder), mental health problems, learning difficulty and developmental delay are higher in children and young people who are in care because of neglectful parenting, emotional and physical abuse.