General Hospital, increased their hours of service and now function 24/7.

There was an increase of 48% of under sixteens presenting to the acute hospital with a mental health crisis in September 2020 when compared to September 2019. However, the number of young people under sixteen presenting with suicidal ideation increased by 133%. Females presenting with suicidal ideation increased by 200%.

Conclusions We hypothesise that the increase in mental health presentations to A&E are largely due to stresses associated with Covid-19 and its direct and indirect impact on physical and mental health along with the re-opening of schools after the first lockdown of 2020. The social isolation and lack of access to pastoral support from schools as well as changes to mental health services resulted in a dramatic rise in the number of young people presenting to A&E with a mental health crisis. The impact of Covid-19 on young people’s mental health will likely be a significant risk factor for future physical and mental ill health across the globe.

British Association of General Paediatrics

983 Clinical audit of slow sodium in children and young people with syncope and/or orthostatic intolerance

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Background Approximately 15% of children will experience at least one episode of syncope in their adolescence, with it being more prevalent in females. Syncope is a symptom caused by transient global cerebral hypoperfusion, resulting in loss of consciousness. Frequent syncope and presyncope symptoms experienced preceding an episode can be disruptive to a child’s lifestyle, causing embarrassment, anxiety and at times injury. Slow sodium is a therapy commonly used in adults with frequent syncope or orthostatic intolerance, taken together with advice to increase water intake, causing increased blood volume. Slow sodium has also been used in children at our local syncope clinic, however, there has been no recent review of its use.

Objectives The aim of this audit of outcome was to determine whether slow sodium supplementation changed the rate of symptoms experienced in children less than 18 years old.

Methods A retrospective analysis was conducted on consecutive patients at a single tertiary centre between 01-10-2014 to 30-09-2019. Patients dispensed slow sodium who were <18 years old, experienced syncope and/or pre-syncope symptoms or orthostatic intolerance, and were reviewed in the clinic during this time frame were included. Patients were excluded if they were treated by a joint slow sodium and fludrocortisone regime from the start of their treatment, used slow sodium for another indication, or had no follow-up appointment 1 year or more after starting treatment.

Data was collected predominantly from clinic letters. Data was recorded both pre and 1 year post treatment, including demographic data, indication for slow sodium use (symptoms and diagnosis), frequency of symptoms, and adverse effects. Two scales were used to categorise the frequency of symptoms. The ordinal scale included categorising frequency of symptoms per day, week, month or year. The Clinical Global Impression (CGI) scale rated the change in symptoms as ‘significantly worse’, ‘no clinically significant change’ and ‘significantly improved’.

Results Overall, 81 patients were included, 54 female and 27 male, with a median age of 14 years (IQR 3). 77 patients had presyncope and/or orthostatic symptoms, and 43 experienced transient loss of consciousness (TLOC) episodes. Most were dispensed a maintenance dose of 100mmol daily. The median dose of slow sodium was 1.62 mmol/kg daily (IQR 0.4 mmol/kg daily). The ordinal scale demonstrated improvement in frequency of orthostatic/presyncope symptoms in 44/46 (95.7%), and improvement in frequency of TLOC in 21/21 (100.0%) evaluable patients, at 1 year or more follow-up. The CGI scale demonstrated improvement in frequency of orthostatic/presyncope symptoms in 63/77 (81.8%), and improvement in frequency of TLOC in 40/43 (93.0%) by 1 year or more follow-up, 4/81 (4.9%) experienced nausea.

Conclusions Slow sodium treatment appeared to be beneficial in reducing frequency of symptoms in the vast majority of patients, with only about 5% reporting adverse effects. However, a randomised double-blind placebo controlled clinical trial is required to prove efficacy by controlling for lifestyle advice, increased fluids, and the passage of time.

British Paediatric Allergy Immunity and Infection Group

984 Enterovirus meningitis cases over a 6 year period in a regional hospital, can in-house film array improve diagnostic yield?

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Background Enterovirus Meningitis (EV) is the most common cause of meningitis worldwide. EV meningitis is often clinically indistinguishable from bacterial meningitis. CSF interpretation can pose a diagnostic challenge as cytology can often be normal. Detection of EV in cerebrospinal fluid (CSF) specimens by PCR is now the gold standard diagnostic test. Prior to April 2016, CSF samples obtained in University Hospital Waterford (UHW), Ireland, were transported to the National Virus Reference Laboratory (NVRL) in Dublin when PCR analysis was requested. Since the introduction of in house molecular testing with BioFire® Film Array® in UHW in April 2016, it provides real-time (RT)—PCR testing of CSF samples on-site with rapid turnaround of results within 60 minutes. This molecular based test with its high sensitivity and specificity (90% and 97% respectively in a recent met-analysis), should impact favourably on patient management by improving antimicrobial stewardship through reduction in intravenous antimicrobial therapy (once bacterial cultures are reported negative) and reduction on inpatient bed-days thus enhancing patient quality care.

Objectives We report our EV positive CSF cases in a 6 year period, looking at the impact of in-house Film Array in the
three years before and after its introduction to UHW in April 2016.

Methods Retrospective data review of all EV positive PCR's from CSF in patients 0–16 years of age in UHW, Ireland from August 2014 to August 2019, inclusive.

Results 13 cases of EV meningitis identified by PCR, 6 cases via the NVRL (April 2013 - March 2016), 7 cases diagnosed in UHW using BioFire FilmArray ME Panel (April 2016 - April 2019). Median age 35 days [range 9 days to 14 years], 46% of patients were under 2 months of age. All 13 patients presented with pyrexia and irritability and treated empirically for a sepsis-like presentation. A ‘normal’ CSF WCC [reference range <30 in infants] was seen in 5/13 patients. 3/9 patients had no pleocytosis when a CSF differential was obtained, 9/13 patients had raised protein in CSF [reference range 0.15–0.45g/L]. The majority of patients had a CRP within normal range of < 10mg/L [median 4.3mg/L, range 0 to 82mg/L], 2/13 patients had raised serum WCC and only 1/13 had lymphocytosis. The mean length of admission (days) in cases identified via the NVRL vs on-site BioFire FilmArray was reduced from mean length of admission (days) in cases identified via the PCR, 6 cases via the NVRL (April 2013 - March 2016), 7 cases diagnosed in UHW using BioFire FilmArray ME Panel (April 2016 - April 2019). Median age 35 days [range 9 days to 14 years], 46% of patients were under 2 months of age. All 13 patients presented with pyrexia and irritability and treated empirically for a sepsis-like presentation. A ‘normal’ CSF WCC [reference range <30 in infants] was seen in 5/13 patients. 3/9 patients had no pleocytosis when a CSF differential was obtained, 9/13 patients had raised protein in CSF [reference range 0.15–0.45g/L]. The majority of patients had a CRP within normal range of < 10mg/L [median 4.3mg/L, range 0 to 82mg/L], 2/13 patients had raised serum WCC and only 1/13 had lymphocytosis. The mean length of admission (days) in cases identified via the NVRL vs on-site BioFire FilmArray was reduced from mean length of admission (days) in cases identified via the NVRL vs on-site BioFire FilmArray was reduced from 5.3 to 3.8 days respectively.

Conclusions The availability on-site Film-array for PCR testing of CSF has led to rapid identification of EV meningitis where there was high clinical suspicion but often normal CSF cytology and low inflammatory markers and negative cultures. Case detection rates were similar in the two study periods however in providing a more rapid turnaround of results compared to the 3 years prior to its introduction in April 2016, in-house BioFire FilmArray has reduced the length of hospital stay in our EV meningitis case series.

British Association of General Paediatrics

A SAMPLE SURVEY: PARENTAL VIEWS ON ROUTINE CHILDHOOD VACCINATION, THE FLU AND COVID VACCINES DURING THE PANDEMIC

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Background Fewer routine childhood vaccinations have been given during the COVID-19 pandemic compared with January to April 2019. The COVID vaccination programme has brought into light a massive wave of concern internationally about vaccination hesitancy thus risking global public health strategies. Are more parents choosing not to access childhood immunisations because of concerns about attending clinical settings, or are they questioning the principles of vaccination in general?

Objectives To improve local routine childhood vaccination rates by identifying parental barriers behind vaccination hesitancy. To share this learning with local child health professionals who support families with decision making around childhood vaccination.

Methods A sample survey was performed in the children’s outpatient department at St Mary’s hospital on 26th & 27th November 2020. It involved a 5-minute open-question discussion with parents regarding their views on routine childhood vaccination, the flu and COVID vaccines. Confidentiality and anonymity were maintained during data collection and analysis. All data was gathered by a single paediatric junior doctor to minimize collection bias. The results were shared with the local child health integrated care team (Connecting Care for Children) at the weekly multi-professional meeting.

Results 27 families were approached. All parents agreed to participate. All children were up to date with their immunisations. Most common parental comments in favour of routine vaccinations included the ‘protection of my child from serious illnesses’, ‘protection of others who cannot be vaccinated’, and ‘following the national paediatric guidelines’. 23 out of 27 children were eligible for flu vaccination with only 35% (8 out of 23) having received it. Up to 30% of parents in the unvaccinated children group said that the flu vaccine ‘was not necessary’, with 22% supporting that they ‘weren’t offered’ or ‘weren’t aware’ their children could have it. 30% of parents were in favour of the COVID vaccine and said they have ‘trust in science’, it is ‘the only way to come back to a normal life’, and that ‘the risk of having it outweighs the risk of not having it’. Those who were negative (44%) or undecided (26%) said that this vaccine is ‘too new to be trusted’, there are ‘unknown long term side effects’, it’s ‘not tested on all age groups’, and ‘there are unknown ingredients’. Parents in the negative/undecided group said that only time could change their mind. Also, if they were to have another baby they would now think twice before vaccinating their child with the routine immunisations.

Conclusions This sample survey has revealed diverse parental views regarding vaccination. Worryingly our results indicate that the arrival of the COVID vaccine has made some parents more reluctant to access routine childhood vaccines. Sharing our results locally has supported child health professionals to address these concerns with families when discussing vaccination. We recommend conducting this survey across other Trusts to assess whether this trend reflects the majority of the population and can be used to address vaccination hesitancy on a national scale.

REFERENCE