Results Nighty-seven subjects completed this study, and 33 (34%) had active physician-diagnosed eczema at 12 months. Twenty-six out of 81 (32%) subjects showed positive in SPT. Eighteen was classified as atopic eczema patients, while 12 were classified as non-atopic eczema patients. During the study period in total 297 skin swab samples were collected. Alpha diversity represented by Shannon (p = 0.001) and Simpson (p = 0.004) indices significantly increased from 1 month to 6 months age, and beta diversity (p = 0.001) differed across age as well. Relative abundance of Staphylococcus (p < 0.001 and 0.04 respectively) and Corynebacterium (p < 0.001 and < 0.001 respectively) progressively decreased across age (adjusted p-value: 1 month to 6 months vs 6 months to 12 months). Alpha diversity of skin microbiome at 12 months was significantly lower in atopic eczema patients than that in non-atopic eczema patients (Shannon p = 0.002, Simpson p = 0.001). Alpha diversity at 1 month and 6 months did not show significant differences among groups. Differences regarding beta diversity and taxa abundance were not found between atopic and non-atopic eczema patients across time.

Conclusions Skin microbiome profiles differ slightly between infantile eczema with and without atopy. Alpha diversity of skin microbiota at left antecubital fossa is lower in atopic eczema patients compared with that of non-atopic eczema patients only during flare-ups at 12 months. This study cannot detect such difference at earlier time points.

Some professional groups were more likely to believe in alternative therapies for ASD than others.

Conclusions Results of study show that many Paediatricians and primary healthcare professionals in Singapore still lack the ability to correctly identify early warning signs of ASD. Furthermore, misconceptions about ‘outgrowing ASD’ along with the misunderstandings on the communicative and cognitive abilities of children with ASD seem little different from earlier surveys dating back to the 1980s. In addition, more than half (73%) of our survey respondents had not received prior training on ASD, which could explain the gap in knowledge of ASD. In order to bridge the gap in knowledge and to raise awareness of ASD among healthcare professionals, more clinical forums and workshops should be held. Keeping abreast with child development and common neurodevelopmental disorders should be an important part of our Continued Medical Education (CME) efforts as members of the healthcare community here in Singapore.
The 2nd baby had grunting, and respiratory distress soon after birth. She was admitted in NICU and started with IV fluid, IV antibiotics and O2 through nasal prong. Investigations revealed covid 19 RT-PCR negative but covid 19 IgG-7.89, IL6-184.0 pg/ml, D Dimer – 919, LDH-593, Trop-I 155.1 ng/L, NTproBNP-567.1, procalcitonin- 0.866 ng/ml with B/L hazziness on CXRay. The mother also had covid IgG -7.89. The baby was treated with IV IgG, SC LMWH, and supportsives. The baby responded to treatment well and discharged.

Conclusions Though cytokine storm is dangerous consequence of covid 19 in Preterm new borns timely diagnosis and appropriate treatment can reduce the morbidity and mortality of the disease.

Background High-flow nasal cannula (HFNC) is a non-invasive positive pressure ventilation which delivers adjustable mixture of heated and humidified air and oxygen at rates that exceed spontaneous inspiratory flow. It’s easy to initiate, relatively safe, and usually well tolerated by children (1). A lot of studies have suggested that HFNC may reduce the work of breathing (1). Early initiation of HFNC has been associated with reduced rate of endotracheal intubation.

Objectives This study aims to provide an overview of HFNC usage in paediatrics general ward setting, outside ICU setting.

Methods A retrospective study was carried out to evaluate the usage of HFNC in paediatric patients in HSIP general ward settings from April 2019 to March 2020.

Results A total of 177 children’s record (boys: 112, girls: 65, age: 1 month to 12 years old) were analysed. A total of 112 patients were referral from district hospital, while 55 patients were referral from our emergency department.

From the analysis, we noted the age group of 12 to 24 months had the highest number of admissions requiring HFNC. Most of the patients were put on HFNC immediately upon admission to ward. The duration of its usage ranges from 2–4 days (interquartile range (IQR)), with median of 3 days. Length of hospital stay were 6 days (IQR: 4 to 8 days). Multiple linear regression analysis showed that duration of HFNC usage and delaying its initiation >6 hours were associated with significantly longer hospital stay (p-value <0.001).

Among the indications for the usage of HFNC, pneumonia is the main cause, followed by acute bronchiolitis, heart failure, sepsis and laryngomalacia. Almost one third (38%) of the patients that required HFNC had underlying disease(s), mainly respiratory disease. SpO2 on arrival were mostly 96% (IQR: 92 to 99%). Respiratory rates were analysed according to age group as well.

The median white cell count (WCC) is 12.96 × 10^3/uL (IQR: 9.67 to 17.27), while C-reactive protein (CRP) is 22 mg/L (IQR: 10.91 to 52.62). Linear regression was used to analyse the correlation between these two parameters, which showed that WCC and CRP are two independent variables.

Conclusions HFNC is an excellent choice of NIV in providing respiratory support in district hospital with no or very limited intensive care unit. Our study showed that it is relatively safe to use with regular vital signs monitoring, with occasionally some patients requiring continuous SpO2 monitoring. Detailed studies on its indication, safety protocol and cost effectiveness are needed to improve the outcome of patients.