British Paediatric Allergy Immunity and Infection Group

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FOLLOW-UP STATUS OF HIV EXPOSED INFANTS IN THE UK 2012–2019

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Background The current vertical HIV transmission (VT) rate is <0.3% among diagnosed women living with HIV (WLHIV) in the UK; this rate excludes a few children whose status remains unknown for various reasons. British HIV Association (BHIVA) guidelines state that all HIV-exposed infants should be tested at age ≤48 hours, 6 and 12 weeks with antibody testing for seroreversion at age 18–24 months ('18–24Ab'). Even if earlier PCR tests are negative, the 18–24Ab remains important as postnatal transmission may occur.

Objectives To describe current paediatric management and the follow-up status of HIV-exposed infants in the UK.

Methods The Integrated Screening Outcomes Surveillance Service (ISOSS) conducts UK population-level surveillance of all pregnancies in WLWH, their children, plus any children diagnosed <16 years. All HIV-exposed children are followed-up until 18–24 months to determine infection status. Reports are triangulated with laboratory reports from PHE. We report the follow-up status of 6547 HIV-exposed children born 2012–2018, reported by December 2019.

Results Overall, 4860 (74%) children were confirmed uninfected based on a negative 18–24Ab; 861 (13%) are indeterminate and in follow-up; 27 (0.4%) were confirmed infected. 370 (5.7%) infants were lost-to-follow-up before 18–24Ab established (59/370 gone abroad); 26 (0.4%) died before infection status established; in 5 cases follow-up testing was declined; 14 had follow-up testing carried out in primary care (not covered by ISOSS reporting).

313/6547 (5%) infants were discharged based on negative antibody at <18mths, including 24 with negative antibody at <12mths (min: 3mths). 71 infants were discharged based on negative PCRs only; 11 discharged at <12mths and 40 at <18mths. Of the 370 infants lost-to-follow-up with unknown infection status, 67 (18%) had only a birth PCR test (16 gone abroad).

Conclusions Despite well-established guidelines and pathways for follow-up of HIV-exposed infants in the UK, there remains some variation in practice and deviation from BHIVA guidelines, with 6% of infants being discharged without 18–24Ab testing. Some of the VTs reported to ISOSS have been identified through 18–24Ab testing with negative PCRs after birth. Vigilance is required regarding potential postnatal transmission, especially in the era of supported breastfeeding and the impact of COVID-19. ISOSS are uniquely placed to monitor outcomes and practice across units and regions, and will continue to provide robust data to support and promote guidelines.

Paediatric Mental Health Association

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PAEDIATRIC EATING DISORDER PRESENTATIONS TO A DISTRICT GENERAL HOSPITAL PRIOR TO, AND DURING, THE COVID-19 PANDEMIC

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Background The COVID-19 pandemic rapidly spread worldwide during 2020, with the first UK case seen at the end of January. During the pandemic a global increase in the number of eating disorder presentations to acute paediatric departments has been noted.¹ Assessing the impact of this locally is essential for determining changes in policies, training and service provision to ensure the needs of these young people are met.

Objectives This retrospective study compared the number, type and acuity of patients presenting with eating disorders to a single district general hospital in England, before and during the global COVID-19 pandemic. The potential impact of related national events, such as lockdowns and school closures, on these admissions was considered.

Methods Information was collected on all patients aged <18 years admitted to the ward with a primary diagnosis of eating disorder (falling under the ICD-10 classification F50) over a 26 month period, 'pre-COVID' (January 2019–January 2020) and 'post-COVID' (February 2020–February 2021). Data recorded included: monthly admission numbers, need for nasogastric tube (NGT) feeding or registered mental health nurse (RMN) support during admission, length of stay and discharge location.

Results During the COVID pandemic ('post-COVID' period) there has been a significant increase in eating disorder admissions for acute nutritional support with a 283% increase in inpatient numbers (average 0.6 admissions/month pre-COVID vs 2.3 post-COVID).

Despite the higher admission numbers, those admitted 'post-COVID' were less likely to:

- require NGT feeding (63% required NGT feeding in the pre-COVID period, compared with 33% in the post-COVID period)
- need RMN support (25% pre vs 10% post)
- be discharged to a tier 4 bed (50% in the pre-COVID period compared with 13% in the post-COVID period)

However 'post-COVID' a proportion of young people required sectioning under the Mental Health Act (7% vs 0% pre) to enable assessment and treatment and the average length of stay was increased by over 50% (pre average 7.5 days vs post 11.3 days) ($p=0.058$).

Conclusions Such significant increases in the number of eating disorder patients admitted to paediatric inpatient units will have a significant impact on acute services, even if the co-existent mental health acuity appears equivalent or lower than pre-pandemic. The look of inpatient paediatric wards may be forever changed and staff training, inpatient facilities and multidisciplinary services need to adapt accordingly. Post-pandemic changes will also need to be monitored to review how further service modifications may be necessary in the future.

REFERENCE

- 1.. Haripersad YV, Kannegiesser-Bailey M, Morton K, et al. Outbreak of anorexia nervosa admissions during the COVID-19 pandemic. *Archives of Disease in Childhood* 2021;106:e15.

Quality Improvement and Patient Safety

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THE SAFE IMPLEMENTATION OF THE KAISER PERMANENTE SEPSIS RISK CALCULATOR IN 4 NEONATAL UNITS

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Background The 2012 Neonatal Early Onset Infection Guideline by National Institute for Clinical Excellence (NICE) [CG149], led to an increase in antibiotic use in well newborns. The Kaiser Permanente Sepsis Risk Calculator (KP-SRC) uses the population's background incidence of EOS, objective information at birth and the infant's clinical presentation to evaluate risk of neonatal EOS in infants >34 weeks gestation. This has safely shown to reduce the use of antibiotics. During the COVID-19 pandemic, the local Operational Delivery Network endorsed the use of the KP-SRC.

Objectives To show implementation of KP-SRC can safely and effectively reduce the incidence of antibiotic use in well babies over 34 weeks gestation without an increase in missed cases of sepsis.

Methods KP-SRC was implemented in 4 neonatal units. KP-SRC is used on all babies with risk factors for infection in accordance with the NICE EOS guideline [CG149] and antibiotics are started according to the recommended outcome. There was slight variation in the parameters used by the units in the calculation of KP-SRC (i.e. Infection incidence rate of 0.8/1000 in 2 units and 0.6/1000 in the other 2 units). Blood culture data during the first seven days of life was provided on a monthly basis by the laboratories.

Babies < 34 weeks gestation were excluded and clinical details of the remaining babies were reviewed, particularly with respect to positive blood cultures and readmissions following discharge home.

Data was reviewed over a consecutive 5 month period prior to implementation of the KP-SRC (1 Sept 2019 - 31 Jan 2020), and post implementation (1 Sept 2020 - 31 Jan 2021).

Results There was a percentage reduction in blood cultures taken in the post KP-SRC implementation period between the 4 units of 52 to 85% (mean 60%).

There were 5 positive blood cultures, all babies were commenced on antibiotics at birth in accordance with the KP-SRC recommendation.

Twenty babies were started on antibiotics after 24 hours of age and received 5 days of antibiotics. Twelve had no risk factors for infection and would not have been picked up by NICE. Of the eight assessed by KP-SRC, two were admitted to the neonatal unit on day 2 with tachypnea but did not require respiratory support. Only one baby was readmitted following discharge and received 5 days of antibiotics. This

baby was readmitted on day 7 with apnoea requiring ventilation. There was a history of maternal prolonged rupture of membranes and mild maternal pyrexia but the baby was well in the immediate postnatal period. Blood cultures were negative with normal CRP's.

Conclusions The KP-SRC can lead to a safe and consistent reduction in the number of well babies receiving antibiotics post-delivery. All babies with positive blood cultures were on antibiotics as guided by the KP-SRC and there were no missed cases of sepsis.

British Paediatric Allergy Immunity and Infection Group

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SUPPORTED BREASTFEEDING AMONG WOMEN WITH DIAGNOSED HIV IN THE UK- THE CURRENT PICTURE AND FUTURE CONSIDERATIONS

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Background The current HIV vertical transmission (VT) rate is <0.3% among births to diagnosed women living with HIV (WLHIV) in the UK. The British HIV Association (BHIVA) recommends formula-feeding infants born to WLHIV, eliminating postnatal transmission, but prior to the COVID-19 pandemic also stated that virologically-suppressed treated women with good adherence choosing to breastfeed may be clinically supported to do so. Guidelines on diagnostics for breastfed infants and maternal viral load (VL) monitoring reflected this, but little is understood about how this worked in clinical practice. Globally, data are lacking on breastfeeding by WLHIV in resource-rich settings.

Objectives To describe the picture of supported breastfeeding from 2012 to March 2020 in the UK using population-level data, with considerations for clinical practice in the COVID era.

Methods The Integrated Screening Outcomes Surveillance Service (ISOSS) conducts surveillance of all pregnancies to WLHIV in the UK and of HIV-diagnosed children <16yrs. Infant feeding intention and actual method have been collected since 2012 with enhanced surveillance of cases of breastfeeding per BHIVA guidelines.

Results Among 7187 livebirth deliveries, 135 (1.9%) were reported as having planned and/or supported breastfeeding; 18/135 were in women who breastfed ≥ 1 infant. Of these 135 pregnancies, 125 (93%) were in women diagnosed pre-pregnancy and 84% (112/133) in women born abroad. Median age at delivery was 35yrs (IQR: 31,40). Breastfeeding duration ranged from 1day-2years.

Enhanced surveillance has been conducted for 102 cases to date. Reason(s) for breastfeeding were known in 81 cases and included: bonding (36), health benefits (36), family pressures (14), disclosure concerns (14) and finance (2) (>1 reason may be reported). Partners were unaware of maternal HIV status in 11/102 cases and GP was unaware in 10/100 (in 2/11, both GP and partner were unaware). There were problems with attendance for monthly VL testing in 22/102 cases.

Breastfeeding was reported to have stopped in 90/102, ongoing in 9/102 and unknown in 3/102 (LTFU). Among 90