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

1226

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

¹Jenny Ziprin, ²Khadija Ben-Sasi, ³Lauren Ferretti, ³Evgenia Panagiotopoulou, ⁴Daniel Geer, ⁴Sara Farhat Dominguez, ⁴Luvena Anthony, ⁴Harshini Naidu, ²Adelene Wong, ²LiYan Chow, ²Sara Tho-Calvi. ¹Imperial College Healthcare Trust; ²Northwick Park Hospital; ³Imperial College Healthcare NHS Trust; ⁴Hillingdon Hospital

10.1136/archdischild-2021-rcpch.490

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

1227

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

Helen Peters, Kate Francis, Rebecca Sconza, Claire Thorne. *Integrated Screening Outcomes Surveillance, UCL Great Ormond Street Institute of Child Health*

10.1136/archdischild-2021-rcpch.491

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

where breastfeeding stopped, 57 infants had a negative antibody test (≥ 18 months); 28 are awaiting confirmatory testing and 5 LTFU before infection status was confirmed. Breastfeeding was reported to have stopped owing to maternal VL rebound in 4/90 (2 infants negative, 2 awaiting confirmatory antibody). A further 3 reported ≥ 1 detectable maternal VL during breastfeeding (1 negative antibody test, 1 in follow-up and 1 LTFU). Among 9 ongoing breastfeeding cases, there was 1 VL blip.

Challenges to data collection included access to maternal monthly test results by paediatric respondents and obtaining infant test results where care was transferred during breastfeeding.

Conclusions Numbers of supported breastfeeding cases remain low, and cases diverse regarding duration and attendance for monthly testing. Findings contribute to clinical awareness of the complexities involved in managing supported breastfeeding, including the importance (and challenges) of monthly testing to identify maternal VL blips and establish infant infection status post-breastfeeding. In recognition of the significant testing burden in the COVID-era, the BHIVA pregnancy guidelines March 2020 statement discourages supported breastfeeding. ISOSS will continue to monitor these cases, providing further insights into clinical practice and outcomes, and supporting future guidelines.

Paediatric Educators' Special Interest Group

1228

COMMUNITY ENGAGED LEARNING: A QUALITATIVE STUDY TO EXPLORE STUDENT AND STAFF EXPERIENCES OF A PILOT SPECIAL EDUCATIONAL NEEDS SCHOOL PLACEMENT

¹Abigail Powell, ¹Sophie Jones, ²Rebecca Johnston, ³Caroline Fertleman. ¹*UCL Medical School*; ²*UCL Institute of Child Health*; ³*Whittington Health*

10.1136/archdischild-2021-rcpch.492

Background Medical professionals report lacking the confidence and assurance necessary to meet the needs of children admitted to hospital with complex needs. This has been linked to limited knowledge, inadequate communication skills and negative attitudes. Training in these areas could improve inpatient experiences for these children.

Objectives We aimed to explore student and staff experiences of a pilot hands-on placement for pre-clinical medical students in a Special Educational Needs school. We reviewed if the project could create sustainable links between the university and community-based organisations and had the potential to improve care for children with disabilities.

Methods 23 pre-clinical intercalating BSc students spent six half days at a school for children aged five to eighteen with complex needs. Their responsibilities included teaching support, attending to personal care and supporting therapy sessions.

Students completed a pre- and post-placement open-ended questionnaire about the perceived benefits and challenges of the placement. They submitted a reflective account of their experience and we conducted semi-structured interviews with three students and two school staff members, to explore emergent themes in more depth.

Results Thematic analysis revealed three key themes:

Greater confidence working with children

Students felt more comfortable working with children and gained confidence in non-verbal communication tools following the placement. There was a notable decrease in stigma and both students and teachers felt the placement would improve the care of children with complex needs in the future.

'... this placement definitely helped my confidence with communicating with patients who may not be verbal or have a form of learning difficulty (P2)'

Increased preparedness for clinical years

Students reported increased preparedness for clinical years. Many identified increased self-confidence after the placement, as well as feeling more comfortable in unfamiliar environments and empowered to take initiative and get involved.

'Since working at the school and understanding how easy it is to communicate with all of these children...it's something I can bring forward with me (P3)'

Multi-disciplinary team working was contextualised, improving students' knowledge of concepts delivered in lectures.

Positive impact on wellbeing

Overall, students reported that the placement had a positive impact on their wellbeing. Practical roles and relationships with students and staff provided a sense of responsibility and belonging, leading students to feel more rewarded about the course.

'Actually getting involved in an organisation where you can do some good is quite important ... I definitely think it has a massively positive impact on my wellbeing (P2)'

The school viewed working with university students positively. Students and staff recommended continuing the project with further iterations guided by student and staff evaluation.

Conclusions This study has shown that a hands-on placement in a Special Educational Needs school can improve students' confidence caring for children with complex needs. The community environment allows students to undertake practical roles, providing a sense of responsibility and belonging, and helps develop transferable skills for subsequent clinical years. This may lead to improvements in care for children with disabilities by decreasing stigma and equipping future medical professionals with communication skills that are specific for those with complex needs.

Paediatric Mental Health Association

1229

PAEDIATRIC MENTAL HEALTH PRESENTATIONS PRIOR TO, AND DURING, THE COVID-19 PANDEMIC

Alyssia Susanne Broomfield, Ian Rodd, Lucinda Winckworth. *Hampshire Hospitals NHS Foundation Trust*

10.1136/archdischild-2021-rcpch.493

Background The COVID-19 pandemic impact on the mental health of the population has been widely reported and paediatric mental health has not been spared (1). Assessing the impact of this on acute paediatric services is important to ensure our facilities and services can meet the needs of these young people going forward.

Objectives This retrospective study looked at changes in number, type and acuity of patients presenting with suicidal ideation and self-harm to a single district general hospital before and during the global COVID-19 pandemic. The potential