British Association of General Paediatrics

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A NATIONAL COHORT OF CHILDREN BORN AFTER ASSISTED CONCEPTION IN THE UK (1992–2009): METHODOLOGY AND BIRTHWEIGHT ANALYSIS

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Background Assisted reproductive technology (ART) usage has increased annually since the first birth in 1978, with over 8 million children born after ART globally.¹ In the UK, the proportion of children born after ART has increased from 0.5% in 1992 to 2% in 2017.² Previous evidence suggests that children born after frozen embryo transfers are heavier and those born after fresh embryo transfers are lighter than those that are naturally conceived (NC), and that these differences in birthweight (BW) are further associated with differences in child growth up to the age of 5.^{3, 4}

Objectives (a) To add research value to the UK Human Fertilization and Embryology Authority (HFEA) registry by utilizing electronic record linkage methodology to establish a cohort of children consisting of those born after assisted conception in the UK between 1992 and 2009, their naturally conceived siblings and matched naturally conceived population controls, and linking this to postnatal records.

(b) To test the validity of the cohort by carrying out an exemplar analysis examining the effects of fresh and frozen embryo transfer on BW.

Methods Study design:

Population-based record linkage cohort study.

Deterministic record linkage between the Human Fertilization & Embryology Authority (HFEA) register and Office for National Statistics (ONS) birth registration datasets was carried out to identify a cohort of children born after ART between 1992 and 2009, their naturally conceived siblings, and matched naturally conceived population controls (HFEA-ONS linkage). This cohort was then linked to the UK Hospital Episode Statistics database to allow monitoring of the child's post-natal health outcomes up to 2015 (HFEA-ONS-HES linkage). Multiple regression and family-matched models were used to compare BW between fresh/frozen embryo transfers and the naturally conceived matched population controls and sibling groups.

Results The HFEA-ONS linkage consisted of 75348 children born after non-donor ART carried out in the UK between 1 April 1992 and 31 July 2009 (linkage success rate: 77%), 14763 naturally conceived siblings and 164823 matched naturally conceived population controls. Of these, 63877 ART, 11343 naturally conceived siblings, and 127544 matched naturally conceived population controls were linked to hospital admissions and outpatient data (HFEA-ONS-HES sub-cohort; linkage success rate: 84.7%). The exemplar analysis showed that children born after fresh embryo transfers were lighter (BW difference: -131g, 95%CI: -140, -123) and those born after frozen embryo transfers were heavier (BW difference: 35g, 95%CI: 19, 52) than the NC population controls. The within-sibling analyses were directionally consistent with the population control analyses, but attenuated markedly for the fresh vs NC (BW difference: -54g; 95% CI: -72, -36) and

increased markedly for the frozen vs NC (BW difference: 152g; 95% CI: 113, 190) analyses.

Conclusions Bespoke record linkage was carried out to generate a new child cohort for use in exploring the relationship between conception via ART and short- and long-term health outcomes in offspring. The exemplar analysis demonstrates (a) the value of the cohort created and (b) that embryocryopreservation, increasingly de rigeur in ART, presents risks to children.

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Child Protection Special Interest Group

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TRAUMA-INFORMED CARE FOR CHILDREN AND YOUNG PEOPLE WHO HAVE BEEN TRAFFICKED: FROM THEORY TO PRACTICE

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Background Modern slavery human trafficking is a human rights violation and a crime affecting millions of children and young people (CYP) around the globe. Research suggests a high prevalence of physical and mental health consequences from the trauma experienced, with potentially profound neuro-developmental and life-long health consequences for survivors. Trauma-informed care (TIC), which aims to meet the complex and unique needs of trauma survivors, is suggested as a way of working with trafficked CYP. However, little research exists on the particular needs of trafficked CYP and how to implement TIC to best address their needs.

Objectives This study aimed to understand current TIC practices for CYP who have been trafficked and to contribute to the evidence base regarding strategic care provision for trafficked CYP.

Methods Twelve experts working with trafficked CYP from a variety of professions were interviewed on their experiences of using TIC in practice. The semi-structured interviews included four main sections: (1) Defining trauma-informed care, (2) Participant's background, (3) Sharing a story of an anonymised case illustrating good quality TIC in practice with a trafficked CYP, (4) Reflections and vision for the future. A thematic analysis of the data was then undertaken to gain a deeper understanding of TIC in practice. Particular attention was paid to ensuring confidentiality of the CYP whose stories were being shared throughout the interviews.

Results Analysis of the data suggested 4 key themes, each with several sub-themes, as detailed below:

(a) TIC starts with a holistic understanding of human trauma that includes understanding trauma and how it manifests, understanding CYP specific needs, and professionals seeing and hearing CYP.

(b) TIC is primarily a relational model of care. Safety is a prerequisite to building a trusting relationship between provider and CYP, giving choices and collaborating with CYP helps give them back control, time is needed to build these

relationships, and empowering trafficked CYP through a strength-based approach is key for recovery.

(c) For TIC to be effective the whole system needs to be trauma-informed as currently the system causes a lot of re-traumatisation. A trauma-informed system would work collaboratively and training would need to be an integral part of that system.

(d) The foundations of TIC already exist in current care practice. It is a model of care that is CYP-centred, holistic, and compassionate. Creating TIC structures also helps decrease vicarious trauma for providers.

Conclusions This study has suggested a trauma-informed model of care for trafficked CYP that puts the provider-CYP relationship at its heart with a foundational basis of knowledge and understanding of trauma and its manifestations in CYP. It suggested a universal trauma-informed system with effective collaboration between professional groups to better address the complex needs of trafficked CYP. Finally, this study found that the foundations of TIC already exist in current practice and that, where TIC structures are in place, vicarious trauma can be reduced for providers. Further research is needed, particularly with CYP themselves, to further develop and adapt that model of care to best address trafficked CYP's needs.

Association of Paediatric Palliative Medicine

914 DEVELOPMENT OF A PARTNERSHIP TO IMPROVE PALLIATIVE CARE SERVICES FOR CHILDREN IN THE GAMBIA

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Background Paediatric palliative care services in LMIC countries compete for resources with many other priorities. Their provision is desirable and includes advocacy, training health and community care workers, policy development and mentorship.

Objectives The THET J&J start-up grants provided an ideal opportunity to establish a partnership with the Ministry of Health (MoH). The long term aim being to develop children's palliative care services in The Gambia. A needs assessment was carried out in early 2020. We hope reporting the results raises awareness of the gaps and possible solution

Methods The study took the form of a cross-sectional design with a focus on estimating the need for CPC and gaps at the country level. A mixed methods approach utilising both quantitative and qualitative data was used. Both primary and secondary data sources were used. The estimation of the need for CPC was based on estimation techniques using the prevalence and mortality of the specific diseases known to require palliative care. The response to the need and existing gaps were analysed using interviews and focus groups with key persons as well as survey data from service providers.

Ethical approval for this study was given by the University of the Gambia, School of Medicine. Reference number R020 004

Results Five organisations completed a Capacity Self-Assessment Tool, 17 staff from 5 facilities were interviewed and 2 Focus Group Discussions conducted (8 staff). The leading cause of death in children was heart disease, then lower respiratory infections and neonatal disorders, with HIV/AIDS being 5th, Tuberculosis 7th and cancer 9th. Under 5 mortality is 47.8 per 1,000 live births. It was not possible to estimate prevalence. Facility capacity assessment to provide CPC ranged from 23%-74%. Themes identified were a need to improve diagnostic ability; a desire for training; improve access and utilisation of medicines; and provide support for families. Training in Palliative care is on the nursing and medical students syllabus. Senior staff were keen for more training. Topics that staff felt anxious about were breaking bad news, anticipating palliative needs and use of medication.

Conclusions The establishment of a training and mentoring service for staff in palliative care is required and desired. Paediatric diagnostic facilities need improved including equipment and access to specialist opinions eg an echocardiogram. in the main hospital in Banjul.

The use of online Palliative training through lectures and modules, supported by scheduled in person visits is thought to be a good solution particularly in the current Covid-19 situation. 1 online lecture session has already taken place for 30 participants, supported by the MoH. This had good media coverage and promoted CPC awareness within the country. M.Sowe is currently undertaking a Palliative Care Diploma in Uganda partly funded by this grant. The World Bank has recently provided funding for specialist paediatrician secondment to The Gambia to improve paediatric services and a memorandum of understanding for patient pathways has been signed with the much larger neighbouring country of Senegal.

British Association for Paediatric Nephrology

916 PREVALENCE, RISK FACTORS AND OUTCOME OF ACUTE KIDNEY INJURY IN HOSPITALISED CHILDREN AT THE JOS UNIVERSITY TEACHING HOSPITAL JOS, PLATEAU STATE. NIGERIA

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Background Acute Kidney Injury (AKI) is a disease of global importance, contributing to high childhood morbidity and mortality. It is a preventable and treatable disease. Early identification of risk factors can prevent disease initiation and enhance prompt diagnosis and treatment.

There are limited data regarding the risk factors and outcome on the disease in Nigeria especially in Jos, Plateau state, and its neighbouring states.

Objectives The objectives of the study was as follows

(1) to determine the prevalence of AKI in hospitalised children at the Jos University Teaching Hospital (JUTH).

(2) To determine the risk factors among hospitalised children with AKI at JUTH.

(3) To determine the outcome of AKI in hospitalised children at JUTH

(4) To determine the association of the risk factors with the outcome of acute kidney injury in hospitalised children at JUTH