Background Assisted reproductive technology (ART) usage has increased annually since the first birth in 1978, with over 8 million children born after ART globally. In the UK, the proportion of children born after ART has increased from 0.5% in 1992 to 2% in 2017. 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.

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 embryo cryopreservation, increasingly de rigueur in ART, presents risks to children.

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Child Protection Special Interest Group

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