British Association of Perinatal Medicine and Neonatal Society

1102 RISK OF CONGENITAL DIAPHRAGMATIC HERNIA AT EARLY AND ADVANCED MATERNAL AGE: RESULTS FROM A POPULATION-BASED COHORT STUDY IN ENGLAND

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Background Despite advances in clinical management, congenital diaphragmatic hernia (CDH) is still associated with high rates of mortality and morbidity in the UK. Population-based studies examining the epidemiology of CDH in the UK are needed to understand which factors are associated with the condition and to inform preventative interventions. A major determinant of outcomes among infants with CDH is the presence of associated anomalies. Although maternal age is a known proxy of sociodemographic, behavioural and biological risk factors for adverse pregnancy outcomes, its relationship with CDH in the UK and how this might vary among those with additional anomalies is not known.

Objectives To examine the relationship between maternal age and CDH, including in the absence and presence of additional anomalies which may suggest syndromic conditions.

Methods We analysed all live-born singletons delivered in NHS England hospitals between 2002 and 2018. De-identified hospital admission and mortality data were searched up until the first birthday to identify infants with a CDH diagnosis, related repair or related death. CDH was further classified as isolated (no additional malformations) or complex (additional malformations beyond the digestive or respiratory systems). The association between maternal age (categorized as <20, 20–24, 25–29, 30–34 and ≥40 years) and any CDH, isolated CDH and complex CDH was estimated using logistic

regression that also included birth period, ethnicity, deprivation, and region of maternal residence at delivery.

Results We identified 2,289 infants with CDH among 7.7 million live-births (3.0/10,000 live-births; 95% CI, 2.8–3.1); 49% were complex cases. Maternal ages of 35–39 and ≥40 years were associated with a 17% and 36% increased risk of any CDH, respectively, compared to the reference age of 25–29 years. There was weak evidence of increased risk for mothers <20 years. Isolated CDH was not associated with any age group. The estimated risk of complex CDH was increased for mothers aged <20, 35–39 and ≥40 years, by 33%, 26% and 63%, respectively, compared to the reference age of 25–29 years.

Conclusions Early and advanced maternal age were associated with complex CDH even after adjustment for other demographic factors, but these associations were not replicated for isolated CDH. While further work is needed to understand the underlying mechanisms, this study suggests that maternal age could be a useful indicator of increased risk of complex CDH.

RCPCH Trainees Committee

1103 HIGH IMPACT, COST-EFFECTIVE HOC-BOX PROJECT SUPPORTING TRAINEE WELLBEING AND MORALE DURING THE COVID-19 PANDEMIC AT A TERTIARY CHILDREN'S HOSPITAL

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Background At the start of the COVID-19 pandemic, emergency rotas were introduced. Trainees were expected to work longer hours or a night shift at limited notice, creating further anxiety amongst trainees already at risk of low morale and burnout. Most doctors already believe that their wellbeing is not valued, and now trainees faced a tougher working environment.

Due to social distancing measures and government guidance, refreshment facilities in the hospital were closed and supermarkets were faced with panic-buying and restricted hours. Prior to the pandemic, an overwhelming majority of doctors missed meals (65%) or did not drink enough water at work (73.7%). But now, trainees were left without access to food or water, particularly out-of-hours.

The Hospital-on-Call Box (HOC-BOX) was created with the postgraduate team to provide free food, drinks and toiletries 24/7 to all trainees, to support them physically and mentally working the emergency rota during the pandemic.

Objectives The HOC-BOX was created to provide trainees with food, drink and other essentials, to boost morale, improve mental wellbeing and support all trainees who had on-call shifts during the COVID-19 pandemic.

Methods An 11-month project using plan-do-study-act (PDSA) cycles was completed. Following the launch of the boxes, they were promoted by the postgraduate team, who have had an integral part in supervising and restocking the boxes. Trainees

Abstract 1102 Table 1 Risk of CDH by maternal age after adjustment for other demographic factors

Maternal Age (Years)	Any (N=2,289)		Isolated (N=1,173)		Complex (N=1,116)	
	n	Risk ratio (95% CI)	n	Risk ratio (95% CI)	n	Risk ratio (95% CI)
<20	137	1.20 (0.99–1.45)	68	1.09 (0.84–1.43)	69	1.33 (1.02–1.73)
20–24	410	1.04 (0.92–1.18)	209	1.01 (0.85–1.20)	201	1.08 (0.90–1.29)
25–29	599	1.00 (Ref.)	312	1.00 (Ref.)	287	1.00 (Ref.)
30–34	650	1.05 (0.94–1.18)	342	1.04 (0.89–1.21)	308	1.06 (0.90–1.25)
35–39	391	1.17 (1.03–1.34)	197	1.10 (0.92–1.31)	194	1.26 (1.05–1.51)
≥40	102	1.36 (1.10–1.68)	45	1.12 (0.82–1.53)	57	1.63 (1.23–2.17)