

Deputy Alan Kelly
Dáil Eireann
Leinster House
Kildare Street
Dublin 2

1 December 2020

PQ Number: 36569/20

PQ Question: To ask the Minister for Health his views on the high rate of neonatal brain injury for two years running in Cork University Maternity Hospital; his views on whether this is an outlier when it comes to other maternity hospitals; and if he will make a statement on the matter. -Alan Kelly

Dear Deputy Kelly,

The Health Service Executive has been requested to reply directly to you in the context of the above Parliamentary Question which you submitted to the Minister for Health for response. I have examined the matter and the following outlines the position:

In answering this question, I have presumed that you are referring to the rate of neonatal encephalopathy in 2018/19 in the Irish Maternity Indicator System (IMIS) results. In Cork University Maternity Hospital, the outcome of all mothers and infants are considered and any outliers to national trends are taken very seriously and reviewed to inform the hospital of any potential issues. In 2018 and 2019 CUMH are aware we are an outlier in our reported numbers of neonatal encephalopathy (NE).

For the purpose of national reporting neonatal encephalopathy is defined as any infant less than 35 weeks' gestation, who during the first week of life have either seizures alone and/or signs of neonatal encephalopathy, which are defined as clinical findings in three or more of the following domains:

- level of consciousness,
- spontaneous activity when awake,
- posture,
- tone,
- primitive reflexes and autonomic system

The definition notes that hypoxic ischaemic encephalopathy (HIE) is a subset of neonatal encephalopathy and is the most common cause but the definition acknowledges that not all infants who have symptoms of encephalopathy have hypoxic ischaemic encephalopathy.

2019 Analysis

In relation to total neonatal encephalopathy in CUMH in 2019, there was a notable marked increase in the number of infants with neonatal encephalopathy *that was not due to hypoxic ischaemic encephalopathy* in comparison to previous years. There were six infants with neonatal stroke lesions; one infant with congenital viral infection, three infants with neonatal seizure disorders, two infants with congenital structural brain anomalies, one infant with significant congenital cardiac disease contributing to encephalopathy and one infant with as yet no clearly identifiable cause for the neonatal encephalopathy. This group of 14 infants were reported as part of CUMH's neonatal encephalopathy figures but on review are an exception to the year on year trends for this category. It is also noteworthy that in CUMH the rates for severe encephalopathy alone are comparable to the national rates. Likewise, the perinatal mortality rates are also comparable with the rates nationally.

In 2020 the expected number of neonates with encephalopathy (year to date, 1/12/2020) is considerably less (n=21 versus n=33) than in 2019. This suggests that the particularly high level last year is likely to be an anomaly rather than an ongoing upward trend.

The neonates included in these results have all been reviewed internally by senior hospital clinicians and the hospital Serious Incident Management Team (SIMT). Our analysis of these cases are presently subject to review by the National Women's & Infant's Programme (NWIHP) who provide external oversight and advice. Any key learning and actions arising from SIMT reviews are reported back to the Ireland South Women & Infants Directorate Executive Management Committee for lessons learned to be disseminated and implemented across the Directorate.

CUMH are committed to providing an excellent service to the women and infants who attend the hospital and part of that quality service is to robustly review our outcomes. We are engaging fully with the National Women & Infant's Health Programme to ensure that our outcomes are externally scrutinised.

Yours sincerely,



John R. Higgins
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