# THE LESSONS OF THE LUCY LETBY CASE

PRIVATE EVE

SPECIAL REPORT

PART 20

**DR PHIL HAMMOND** (MD)

# THE LUCY LETBY CASE: PART 20

#### **Appeal court confusion**

LUCY LETBY was convicted of the attempted murder of Baby K entirely on the evidence of consultant Dr Ravi Jayaram, who said he was surprised she had not asked for help with such a sick baby, and then walked in on her just after she had deliberately dislodged its breathing tube.

The jury agreed and the appeal court declared the conviction to be safe, despite stating: "Legitimate criticism can be made of his [Dr Jayaram's] evidence. Although he believed that Letby had deliberately dislodged the endotracheal tube, he said nothing about it at the time, nor for many months thereafter. There was an inconsistency between his evidence and the contemporaneous records."

On 12 April, the *UnHerd* website revealed an email Dr Jayaram had written to his colleagues on 4 May 2017, "stating the facts" that Letby called him to inform him of Baby K's

low saturations (see last *Eye*). He then came to help her. This email puts the safety of the Baby K conviction further in doubt – but not according to the *Daily Mail*, which on 14 April quoted "a source close to the case" saying: "The email was disclosed to the prosecution, Letby's defence team and the judges at the court of appeal before her application to appeal her conviction in relation to Baby K. There is no material contradiction between the email and Dr Jayaram's evidence, so it was deemed irrelevant."

Letby's barrister Mark McDonald categorically states that the email was *not* put before the appeal court and is highly relevant. The appeal court must now clarify.

#### **Probable explanations**

MEDICINE is not an exact science. There are often competing explanations for collapses and deaths, especially when deliberate harm is alleged without any confession, direct observation or compelling forensic evidence.

The successful appeals for Sally Clark and Angela Cannings, two mothers who in separate cases had been wrongly jailed for killing their children on the discredited evidence of paediatrician Sir Roy Meadow, relied on the question: "Which of the competing explanations for the deaths and collapses is the most probable?" To answer this in the Letby case, the Criminal Cases Review Commission (CCRC) will need some statistical help.

#### Send for the statisticians

ONE of the hallmarks of the Letby trial was the failure to include expert statistical evidence from either side. This does not mean that statistics played no part in the trial – indeed, they were central to it – but rather there was no statistician to spot or stop the statistics being butchered before they were laid before the jury.

The prosecution initially hired a statistician Professor Jane Hutton – but then unhired her following advice from the Crown Prosecution Service (CPS), which the Information Commissioner refuses to divulge (see last Eye). To understand why the CPS was so wary of statistical analysis, MD contacted eight of them: Philip J Brown, emeritus professor of statistics, University of Kent; A Philip Dawid, FRS, emeritus professor of statistics, University of Cambridge; Richard Gill, emeritus professor of statistics, Leiden University; Peter Green, FRS, emeritus professor of statistics, University of Bristol; Julia Mortera, honorary professor, University of Bristol; Stephen Senn, independent consultant statistician; Jim Q Smith, professor of statistics, University of

Warwick; Simon Wood, professor of statistical computing, University of Edinburgh.

All eight agreed on the wording for the analyses below of three key statistical claims made by the prosecution. If any *Eye*-reading statisticians disagree, please contact MD.

### **CLAIM 1**: Letby was there for all suspicious events

A ROSTER chart seen by jurors showed Letby was present at all of 25 suspicious incidents while for the other 37 nurses in the chart the

highest number was seven. The fact that Letby was "always there" sunk her in the minds of the jury. This was statistically biased for a number of reasons:

**1** Many more deaths and collapses occurred during that time period, but it was entirely left to a single prosecution expert, Dr Dewi Evans, to determine what was suspicious and what was not suspicious, without any objective definition or independent corroboration.

**2** Evans initially identified 10 more suspicious events than appeared on the final chart shown to the jury, but when it transpired Letby was not present for them, they were removed. A classic example of selection bias to promote the prosecution argument.

**3** Letby was one of the more experienced nurses, volunteered for shifts when the unit was busy and had an intensive care qualification, so she was assigned to care for the sickest babies.

**4** Letby was present for 10 of 13 deaths that occurred on the unit between June 2015 and June 2016 inclusive. Three other babies died at other hospitals during this time, having passed through the Countess of Chester hospital (CoCH). The death spike consisted of 16 babies, only seven of which were attributed to Letby. What factors contributed to the other nine deaths – a far higher number than normal? Could these factors have contributed to all 16 deaths?

**5** The 25 suspicious events were presented as if they were independent of each other, but they were not. If a baby collapses once, for whatever reason, it is more likely to collapse again. And if one twin collapses, the other is at higher risk of collapse. The roster features three sets of twins and a very high-risk set of triplets, and multiple events are included for some babies. This was a cohort of unusually high-risk babies passing through a demonstrably understaffed unit. Of all the competing explanations for the 16 deaths, substandard medical care was a highly probable contributory factor, and far more likely than deliberate harm.

**6** The 25 suspicious events were also represented as if they were independent of problems in the maternity unit, which had a rise in its stillbirth rate. It is vital to consider the two together. For example, the high-risk triplets should never have been delivered at the CoCH, and their poor condition post-delivery is likely to have contributed to the deaths of two.

7 When babies die avoidably, who is not there matters as much as who is there. Could babies have died not because Letby was there, but because senior doctors weren't there to help? Do we need a roster of absence?

## **CLAIM 2**: The deaths followed Letby around

THE prosecution argued that suspicious incidents followed Letby when she was moved on to day shifts. However...

1 Four deaths occurred on day shifts prior to the change in Letby's shifts from night to day (in

September 2015, January 2016, February 2016 and March 2016). She was not on shift for these deaths.

**2** After Letby's shifts were changed, two deaths occurred on days she was present, with which she was charged. These were babies O and P, who were two of the three monochorionic (very high-risk) triplets delivered prematurely. It is not unusual for triplet deaths to occur close together. Research published in 2023 shows that even uncomplicated pregnancies of such triplets have a high death rate: a quarter will end with the death of at least one triplet.

#### **CLAIM 3**: The deaths stopped when Letby was removed in late June 2016

THIS is true, but it coincided precisely with CoCH's neonatal unit being downgraded from a level 2 unit to level 1, meaning it would no longer take high-risk babies. Not taking high-risk babies, along with other changes such as staffing improvements, would have resulted in a fall in deaths and collapses. Of the two competing theories for the fall (no more murders, downgrading the unit), the latter definitely happened and is the more probable explanation.

#### The wider picture

JUST as a neonatal unit cannot be judged without analysing its maternity unit too, a single hospital's outcomes need to be seen in relation to what is going on in the region, and nationally. Was the care delivered at CoCH not dissimilar to that of other level 2 units at the time? Was the maternity and neonatal unit fully equipped to deal with the influx of higher-risk births, particularly multiples, during that time? Should some of the babies have been delivered and cared for in tertiary/level 3 units (which offer the highest level of care)? Were they diverted to Chester because there simply wasn't the space or transport available for them to be treated elsewhere? Are higher-risk births sometimes diverted to level 2 units to protect the outcomes, reputation and CQC grading of level 3 units? Or did Chester cling on to its level 2 status for financial reasons, even though it lacked the staff and expertise to maintain it?

The scapegoating of Letby could be a convenient smokescreen for much wider



system failures. And until these are addressed, hundreds of babies will continue to die avoidably each year in the NHS.

This report originally featured in Private Eye issue 1648.

To read parts 1-19 please visit www.private-eye.co.uk/specialreports

DON'T MISS OUT Subscribe today PRIVATE EVE www.subsonline.co.uk 01858 438 850

