

## Correspondence

### Survival and long-term neurodevelopmental outcome of the extremely preterm infant. A systematic review

To the Editor

I read with interest the paper by Lorenz<sup>1</sup> on the survival and long-term neurodevelopmental outcome of the extremely preterm infant. The incidence of preterm delivery and the survival rate of preterm newborns are rising, due to the increased use of assisted reproductive technology associated with multiple gestations and improved technology in obstetrics and neonatology, which allow saving preterm infants at earlier gestational ages. As a consequence, the risk of developmental disabilities in preterm children is high.<sup>2</sup> The levels of perinatal and neonatal mortality have declined in developed countries following advances in neonatal care, the introduction of high technology, and better knowledge of the pathophysiology of newborn infants. This is obvious from the promising data addressed by Lorenz.<sup>1</sup> No detailed data on the survival and long-term neurodevelopmental outcome of the preterm infants in the developing countries are yet present for comparison. However, they most likely looked unfavorable, as these countries are constrained by the limited financial and human resources. With limited resources, it is necessary to prioritize neonatal care to achieve the goal of improving the survival and long-term outcome of preterm babies, in particular very low birth weight (VLBW) infants. It is essential to collect minimum meaningful perinatal data to define the problems of each individual country. This is crucial for monitoring, auditing, evaluation, and planning of perinatal healthcare of the country. The definition and terminology in perinatology should also be uniform and standardized for comparative studies.<sup>3</sup> Additionally, it is solicited to widely implement the advances in perinatal interventions, such as antenatal steroid therapy, ventilator techniques, surfactant therapy, and enhanced nutrition as they have been significantly contributed to the dramatic improvement in the survival of VLBW infants in the developed countries.<sup>4</sup>

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### Reply from the Author

I strongly endorse Prof. Al-Mendalawi's call for the collection of meaningful perinatal data as evidence based advances in perinatal care are implemented in developing countries, and eventually, extended to more premature infants than are currently offered intensive care. Standardized reporting with uniform definitions, such as those developed by the Vermont Oxford Network,<sup>5</sup> are critical for benchmarking performance and tracking quality improvement initiatives. A minimum meaningful perinatal data set should be developed collaboratively with stakeholders incrementally, starting with the most valid indicators that can be most easily abstracted from the medical record. Compiling such data, even from an electronic medical record much less a paper record, can be a daunting task. Care should not be taken to be too ambitious at the outset. Initial success in the development of an even rudimentary data set will generate enthusiasm and commitment that will carry the data set initiative forward. Failure will lead to discouragement that will undermine the prospects for the development of a robust database.

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