



Hospital mortality of very low birth weight newborn infants

Dear Editor,

It was with great interest that we read the article on hospital mortality of neonates with birth weight less than 1,500 g in Fortaleza (Brazil)¹ and the editorial commenting on it.² The original article mentions that, "several initiatives are being developed towards the formation of multicenter neonatal networks," such as those in the South and Southeast of Brazil, the Vermont Oxford Network (VON) and the NICHD, and also states that, "What makes comparison with Montevideo of interest is that it is a Latin-American city with a population that approximates Fortaleza's and a similar study has been carried out there." The authors of the editorial suggest that the results from Fortaleza be compared with other Brazilian NICUs, especially the Brazilian Network of Neonatal Research.²

We believe that it was remiss not to include the Grupo Colaborativo NEOCOSUR (<http://sistemas.med.puc.cl/Neocosur/ingles/neocosur.asp>) the objective of which is to prospectively collect the biodemographic characteristics of neonates born weighing less than 1500 g and their mothers, and to analyze the incidence of the neonatal pathologies with greatest impact, comparing, over the years, the tendencies in changing medical practices.

This network is made up of 16 Neonatal Units in five South-American countries (Argentina, Chile, Peru, Paraguay and Uruguay) and, from 2000 to 2005, has accumulated a total of 5,093 cases, with a hospital mortality rate of 26.6%, lower than that described in Fortaleza and Montevideo. It has published in indexed journals,³ including the *Jornal de Pediatria*,⁴ and given presentations at several scientific gatherings, such as the SPR and the SLAIP. Additionally, the network has investigated, within the population of VLBW neonates, the morbidity and mortality of small for gestational age infants (< percentile 10 for gestational age).⁵ The editorial mentioned earlier also stated that in order to further reduce mortality, the permanent monitoring and improvement of the quality of care of small babies is a key element.

Another strategy based on the data collected by the NEOCOSUR was the development of a new *risk of neonatal death score*, with better predictive value than CRIB or NICHD, and which is used to compare the quality of care between centers (benchmarking), providing the basis for recommendations and an adjustment variable for later research.⁶

In complete agreement with the proposal made in the editorial, we also believe that, in our region, a transcending factor in the prediction of morbidity and mortality among these extremely vulnerable children is not the availability of technological resources, but the application of *evidence-based interventions* (such as prenatal corticoids – NEOCOSUR coverage: 71%) and *human resources* (basically, nurses).

The developing countries of Latin America should join forces, as in the Brazilian ventures and the Grupo Colaborativo NEOCOSUR, in order to explore and develop original strategies that will enable a significant reduction in neonatal mortality, the principal component of infant mortality.

References

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Authors' Reply

Dear Editor,

It was most stimulating to perceive the attention with which Dr. Carlos Grandi, of the Grupo Colaborativo NEOCOSUR, read our article and his openness to the exchange of concerns and ideas for reducing perinatal morbidity and mortality.

This obvious demonstration of the vitality of perinatology in our region is very animating and indicates a platform of changes that are the order of the day: improve the standard of clinical practices in the region and obtain a positive impact on the health of our newborn infants. To achieve this, one initiative is to organize health services, i.e., neonatal units, within a perspective of collaborative work, in networks, which overcomes the isolation of professionals and brings them into processes of collaborative learning that aim at increasing knowledge and changing professional practices.

Recently, Children's Health and Breastfeeding section of the Health Ministry and the Núcleo de Assistência, Ensino e Assistência da Infância César Victora (NEAPI), part of the Pediatrics service at the Medical Faculty/UFC, signed an agreement to bring the North-Northeast Perinatal Health Network

into operation. This network will combine around 70 neonatal units in the two regions and will collect information on approximately 1,500 newborn infants each month.

One of the network's basic reasons for existing is to make it possible for professionals to develop a culture of innovation and evaluation of their own experience by means of continuing education strategies, in the mold of the Circle of Quality (www.renospe.org/novo).

To compare our performance with ideal conditions and to reflect on what takes place with relation to the health of newborn infants in countries or regions with conditions similar to ours, has the potential to innovate and can create many opportunities for cooperation with similar experiments in the region.

Our team has been monitoring the NEOCOSUR network since the end of 2005 and, from now on, the conditions are ripe for our neighbors to get to know and cooperate with the less developed regions of Brazil.

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