

Antenatal corticosteroids to reduce preterm deaths in low-income settings

In their Comment (April issue),¹ Kishwar Azad and Anthony Costello raise questions that should be answered before antenatal corticosteroid treatment is scaled up to reduce preterm deaths in low-income countries. We share their concerns about the unknown overall effect of this treatment on mortality and potential safety issues in the mother. To answer these questions, we have initiated the Antenatal Corticosteroids Trial² to assess whether or not a multifaceted intervention to increase the use of antenatal corticosteroids reduces neonatal mortality at 28 days of age, and maternal morbidity due to infections. Enrolment has been completed and data from more than 90 000 births have been collected.

We disagree with Azad and Costello's comment about the effect of antenatal corticosteroid treatment on respiratory

distress in infants at 34 weeks' gestation. This statement is based on a subgroup analysis from a systematic review.³ However, the same review presents data showing a decreased risk of respiratory distress syndrome in infants with first dose of corticosteroids administered to mothers at 33–35 weeks' gestation (relative risk [RR] 0.53, 95% CI 0.31–0.91), and a non-significant decrease in the risk of respiratory distress in infants (0.61, 0.11–3.26) with first dose at 35–37 weeks' gestation. The findings suggest a reduction in respiratory distress syndrome is present according to gestational age at first delivery of corticosteroids.³

Prevention of respiratory distress syndrome in infants born at 33–36 weeks' gestation without access to specialised high-quality level 2 care might create a substantial health-care burden in low-income countries. The Antenatal Corticosteroids Trial² will assess the administration of steroids to mothers up to 36 weeks' gestation. Data from this trial will be available in the second half of 2014. We hope that

several of the concerns expressed in the Comment by Azad and Costello will be addressed.

We declare that we have no competing interests.

Copyright © Althabe et al. Open Access article distributed under the terms of CC BY-NC-ND.

*Fernando Althabe, José M Belizán, Pierre Buekens, *Elizabeth M McClure, Marion Koso-thomas, on behalf of the NICHD's Global Network for Women's and Children's Health Research ACT Trial Steering Committee*
 mcclure@rti.org

Institute for Clinical Effectiveness and Health Policy, Buenos Aires, Argentina (FA, JMB); Tulane School of Public Health and Tropical Medicine, New Orleans, LA, USA (PB); RTI International, 3040 Cornwallis Drive, Durham, NC, 27709, USA (EMM); Eunice Kennedy Shriver National Institute of Child Health and Human Development, Rockville MD, USA (MK-T)

- 1 Azad K, Costello A. Extreme caution is needed before scale-up of antenatal corticosteroids to reduce preterm deaths in low-income settings. *Lancet Glob Health* 2014; **2**: e191–92.
- 2 Althabe F, Belizán JM, Mazzoni A, et al. Antenatal corticosteroids trial in preterm births to increase neonatal survival in developing countries: study protocol. *Reprod Health* 2012; **9**: 22.
- 3 Roberts D, Dalziel SR. Antenatal corticosteroids for accelerating fetal lung maturation for women at risk of preterm birth. *Cochrane Database Syst Rev* 2006; **3**: CD004454.

