Reviewer's report

**Title:** Point-of-Admission Hypothermia among High-Risk Nigerian Newborns

**Version:** 2 **Date:** 25 June 2008

**Reviewer:** Abbot Laptook

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Review: Point of Admission Hypothermia among High Risk Nigerian (BMC-Pediatrics 062508)

This brief report is a survey of admission temperatures among infants at a teaching hospital in Nigeria. As the authors appropriately point out, hypothermia in the immediate neonatal period is a common problem in the African continent and is associated with important morbidity and mortality. The study is an analysis of admission temperatures for 150 neonates admitted over a 6 month interval with characterization of the extent of hypothermia, demographics, and short term outcome. The report serves the purpose of providing a recent cohort of neonates in the third world and the issues of hypothermia. The paper could be substantially improved with some additional information and a clear analysis plan. Specific issues are as follows:

1) **Introduction/Methods:** the report is described as a prevalence/cross-sectional study but the details of consecutive admissions over a defined time are an incidence study among a cohort.

2) **Methods:** Temperatures are recorded from “skin (axillary)...” which is confusing since axillary temperature is a measure of core temperature if recorded properly but skin temperature may or may not agree with axillary temperatures depending on the thermal environment of care (eg isolette vs open bassinet).

3) **Methods:** “Place of delivery” needs to be defined. Is this home, another hospital, birthing center?

4) **Methods:** There needs to be a clear analysis plan. It may help to analyze in-born and out-born data as two separate data sets. Temperatures really should be examined in terms of hours from birth especially in the first day of life. Right now the information is lumped into long time intervals where the start and end of the first 24 hours may be very different in terms of temperature results. This is especially pertinent for the inborn infants.

5) **Results:** Are 150 infants correct for the entire 6 month interval?

6) **Results:** There needs to be some description of the care practices provided to infants between birth and the temperature at the point of admission to better understand the results.

7) **Results:** The authors may want to consider simplifying the analyses; for example there is no-apriori reason to expect different temperatures among male and females assuming they are of the same gestation and birth weight.
8) Table 2 is probably not very helpful given the small number of infants < 1.5kg in this data set.
9) Results/mortality: Is there any additional information to characterize the type of illnesses associated with mortality among the cohort?
10) Discussion: It may be helpful to provide a description of the “warm chain” and proper skin to skin techniques to minimize cold stress.

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.