



WHO/Catherine Gordon

## WHO Statement on antenatal care January 2011

The World Health Organization (WHO) promotes a model package of antenatal care that implements evidence based interventions through reduced but goal-oriented clinic visits. This model is also referred to as “focused” or “basic” antenatal care. A review of evidence (1) when the model was introduced, showed that health outcomes with this approach were comparable to those receiving the standard antenatal care model with several clinic visits.

A recently updated Cochrane systematic review “Alternative versus standard packages of antenatal care for low-risk pregnancy”, using new methods and with additional trial data, has shown a statistically significant increase in perinatal mortality associated with packages of antenatal care that are goal-oriented and based on reduced numbers of clinic attendances (2). In light of this report, on 9–10 November 2010, the World Health Organization convened a technical consultation to discuss the implications of these findings.

Preliminary review of the data indicates that the majority of data in the systematic review come from the three largest cluster randomized trials – all of which were performed in low-to middle-income countries that differed somewhat in baseline health risks and availability of resources. The increase in perinatal mortality is a consistent finding in all three studies, although only the pooled estimate reached statistical significance. In the largest trial the increased mortality is based particularly, but not exclusively, on an increased number of stillborn babies before 37 weeks, and shows some

intercountry variation. At present, the reason for increased perinatal mortality is unknown. It is possible that differences in background risks in the populations have differential effects on fetal health and well-being. Another possibility is that the gap between the visits in the second and third trimester of pregnancy may have been too wide for timely identification of fetal ill-health and action when these problems occurred.

WHO and the researchers of the two Zimbabwe trials are undertaking secondary analyses of trial data to try to obtain an insight into this finding and possible explanations, and will communicate the findings of the secondary analyses to the international community.

Furthermore, WHO advises that implementation of a complex intervention package such as antenatal care should be monitored and audited with a focus on quality of care, i.e. evidence-based practices that are intended to be delivered through the programme, and maternal and perinatal outcomes, especially stillbirths.

WHO plans to produce an updated evidence-based guideline on antenatal care that will be informed by these findings and other systematic reviews of interventions that may be effective in improving perinatal outcome during antenatal care. The updated evidence-based recommendations are likely to be finalized in 2012.

The updated *WHO Reproductive Health Library* commentary and the Cochrane review are accessible at [http://apps.who.int/rhl/pregnancy\\_childbirth/antenatal\\_care/general/cd000934\\_mathaim\\_com/en/index.html](http://apps.who.int/rhl/pregnancy_childbirth/antenatal_care/general/cd000934_mathaim_com/en/index.html)

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## References:

1. Carroli G, Villar J, Piaggio G, Khan-Neelofur D, Gülmezoglu M, Mugford M, Lumbiganon P, Farnot U, Bersgjø P; WHO Antenatal Care Trial Research Group. WHO systematic review of randomised controlled trials of routine antenatal care. *Lancet*, 2001, 19;357(9268):1565-1570.
2. Dowswell T, Carroli G, Duley L, Gates S, Gülmezoglu AM, Khan-Neelofur D, Piaggio GGP. Alternative versus standard packages of antenatal care for low-risk pregnancy. *Cochrane Database of Systematic Reviews* 2010, Issue 10. Art. No.: CD000934. DOI: 10.1002/14651858.CD000934.pub2.

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