ANTENATAL CARE PACKAGES WITH REDUCED VISITS AND PERINATAL MORTALITY: A SECONDARY ANALYSIS OF THE WHO ANTENATAL CARE TRIAL

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BACKGROUND: the WHO Antenatal Care Trial (WHOACT) concluded that antenatal care packages of evidence-based screening, therapeutic interventions and education across four visits for low-risk women was not inferior to standard care and may reduce cost. A 2010 Cochrane review identified increased risk of perinatal mortality (borderline statistical significance) in three cluster-randomized trials (including WHOACT) in developing countries. We conducted a secondary analysis to determine the relationship between reduced visits, goal-oriented antenatal care package and perinatal mortality.

METHODS: Exploratory analyses to assess the effect of baseline risk and timing of perinatal death. Women were stratified by baseline risk to assess differences between intervention and control groups. We used linear modeling and Poisson regression to determine relative risk of fetal death, neonatal death and perinatal mortality by GA.

RESULTS: There were 161 fetal deaths (1.4%) in the intervention group compared to 119 fetal deaths in the control group (1.1%) with an increased overall adjusted relative risk of fetal death (Adjusted RR 1.27; 95%CI 1.03-1.58). This was attributable to an increased relative risk of fetal death between 32 and 36 weeks of gestation (Adjusted RR 2.24; 95% CI 1.42, 3.53) which was statistically significant for high and low risk groups.

CONCLUSION: It is plausible the increased risk of fetal death between 32 and 36 weeks gestation could be due to reduced number visits, however population heterogeneity or care quality differences and visit timing could be playing a role. Implementing reduced visit models demands careful monitoring of maternal and perinatal outcomes, especially fetal death.