

Background: The offspring of women with hypertension during pregnancy are at increased risk of low birth weight, preterm birth, diseases of prematurity and death. The risk of developing these outcomes among women with either preeclampsia or chronic hypertension, relative to those with gestational hypertension, is not known. Study design: Prospective cohort study. Participants: A total of 1948 singleton women seen at a large tertiary care obstetrical center, whose blood pressure was greater than 140/90 mm Hg during pregnancy. The four types of hypertension were strictly defined: 864 women (44.4%) had gestational hypertension, 459 (23.6%) isolated chronic hypertension, 501 (25.7%) isolated preeclampsia, and 124 (6.4%) chronic hypertension with superimposed preeclampsia. Outcome measures: The primary outcome of the study was a composite of the diseases of prematurity, need for assisted ventilation for greater than 1 day, or perinatal death. The secondary outcomes were each of those included in the primary endpoint, as well as admission to the neonatal ICU, small for gestational age (SGA) birth weight and preterm birth. We controlled for the effects of other maternal risk factors, such as age, parity, history of preterm delivery, cigarette smoking, pre-pregnancy weight, diabetes mellitus (DM), renal dysfunction, and current use of an antihypertensive agent or prednisone. Results: For the primary composite outcome, compared to the offspring of women with gestational hypertension, the adjusted odds ratio was 1.9 (95% confidence interval 1.2 to 3.0) in the preeclamptic group and 2.0 (95% confidence interval 1.0 to 4.0) for those with chronic hypertension plus superimposed