Stillbirth trends in the United States

MF MacDorman, UM Reddy, RM Silver. Trends in stillbirth by gestational age in the United States, 2006-2012. Obstet Gynecol. 2015; 126(6):1146-1150.

SE Little, CA Zera, MA Clapp, L Wilkins-Haug, JN Robinson. A multi-state analysis of early term delivery trends and the association with term stillbirth. Obstet Gynecol. 2015; 126(6):1138-1145.

THE PAST 10 YEARS HAVE SEEN efforts to reduce the number of babies born before 39 weeks gestation, or early term births. These two studies examined whether or not reducing early term birth was associated with an increase in stillbirths – in other words, do longer gestations lead to more stillbirths? Are policies being misapplied to high-risk pregnancies?

MacDorman et al. (2015) examined stillbirth trends from 2006, the year when the preterm birth rate began to decline, until 2012, the latest year in which data were available. Overall, the national stillbirth rate was the same in 2006 and 2012 (6.05/1000), so the authors examined whether there were any changes in rates of stillbirth at different gestational ages. Using a prospective measure of stillbirth – a comparison of the number of stillbirths occurring at a given gestational age to the number of live births and stillbirths at that gestational age and greater, a measure that encompasses the risk of stillbirth for all women pregnant at a given gestational age – the authors found no changes in rates of stillbirth at varying gestational ages. They concluded that preventing nonmedically indicated births at less than 39 weeks gestation did not increase the rate of stillbirth.

Little et al. (2015) examined stillbirth rates on a state-by-state basis, seeking to determine whether the states with the greatest reductions in early term births had increases in stillbirths, and also whether the rates of stillbirth varied between high- and low-risk pregnancies. Using retrospective birth certificate and fetal death data from 2005 to 2011, they also found that the overall stillbirth rate did not change. The authors then determined the percentage of early term births (37 to 38^{+6} weeks) occurring in each state in 2005 and in 2011, and calculated the percent change. There was significant variety among states, ranging from Delaware which reduced its early term birth rate by 25.5%, to Arkansas which saw a 3.9% increase in its early term births. However, the authors found that there was not an increased risk of stillbirth in states that, like Delaware, significantly reduced the numbers of early term births.

Preventing nonmedically indicated births at <39 weeks does not increase the rate of stillbirth.

The authors further categorized pregnancies as low-risk or high-risk based on birth certificate data; high-risk pregnancies were those in which hypertension or diabetes was reported. Again, there was no increase in stillbirth for low-risk pregnancies or for pregnancies complicated by hypertension. However, there was a statistically significant increase in stillbirth observed for pregnancies complicated by diabetes, from 302/100,000 in 2005 to 532/100,000 in 2011. This increase was true independent of state-level reductions or increases in early term birth rates. The authors note that this could be a result of an increase in the proportion of pregnancies complicated by diabetes, which could be caused by changes in documentation and reporting, or may actually reflect an increase in the rate of diabetes among pregnant people. While more research is needed to tease out what relationship may be occurring between diabetes and stillbirth, on the whole, their findings were reassuring that encouraging full term gestation and discouraging early term birth does not cause an increase in the rate of stillbirth. ◉