

Postpartum Hospital Utilization among Massachusetts Women with Intellectual and Developmental Disabilities

Introduction and Background

Women with intellectual and developmental disabilities (IDD) have vastly different social, economic, and health outcomes from their counterparts without IDD; in addition, they are frequently denied sexual and reproductive autonomy and are at higher risk of pregnancy complications and adverse birth outcomes such as pre-eclampsia, eclampsia, venous thromboembolism, chorioamnionitis, antepartum hemorrhage, labor inductions, and Cesarean sections (Brown et al, 2016; Mitra et al, 2015; Parish et al, 2015). Women with IDD are also less likely to use adequate and timely prenatal care (Mitra et al, 2015).

Despite the growth of knowledge about the perinatal health of women with IDD, a research gap still remains with regard to the health and healthcare utilization of women in the United States with IDD after childbirth. Monika Mitra, Susan Parish, Ilhom Akobirshoev, Eliana Rosenthal, and Tiffany Moore Simas—a group of researchers from Brandeis University, Northeastern University, and the University of Massachusetts Medical School—aimed to help bridge this gap through an analysis of data on postpartum hospital admissions and emergency department (ED) use among women with IDD in Massachusetts.

How the Study Was Done

To find out whether IDD women had different postpartum hospital admissions and emergency department (ED) use from other women, we used data from the Massachusetts Pregnancy to Early Life Longitudinal Data System, or PELL. The study population comprised women who had single births in Massachusetts between 2002 and 2012. We classified women as having an IDD if they had any diagnoses related to IDD during any hospitalization or ED visit. Diagnostic categories were based on the International Classification of Diseases (ICD), 9th Edition.

The study compared postpartum hospitalization and ED use of 1,104 deliveries to IDD women and 778,409 women without IDD.

First, we compared demographic information about the women in the study, including their age, race or ethnicity, birthplace, and the language they used to discuss health issues. We also compared their socioeconomic statuses, based on data about education, marital status, whether the father was listed on the birth certificate or not, access to health insurance, smoking, previous births (if any; also known as "parity"), and adequacy of prenatal care based on the Kotelchuck index, which is based on the month prenatal care began and the number of prenatal care visits during each trimester of the pregnancy (1994, 1997).

Finally, we compared the hospital and emergency department use during the critical postpartum periods, within 1–42, 43–90, and 91–365 days after childbirth. Additionally, we also compared repeated (two or more) hospital and emergency department use and frequent (four more) ED use.

Results and Discussion

After conducting comparative analyses, Mitra, Parish, Akobirshoev, Rosenthal, and Simas found that women with intellectual and developmental disabilities had markedly different experiences from their counterparts without IDD in several different domains. Women with IDD were more likely to

- receive "adequate plus" prenatal care based on the Kotelchuck index,
- smoke during pregnancy,
- have more than one pre-pregnancy comorbidity—a condition that often co-occurs with another
- have a low-birthweight infant, and
- have a Cesarean delivery (C-section)

compared to their peers without IDD.

Women with intellectual and developmental disabilities were much more likely to be admitted to hospitals and visit the emergency department within 1–42, 43–90, and 91–365 days after childbirth compared to women without IDD. Furthermore, women with IDD had also a risk of repealed (two or more) hospital and emergency department use and frequent (four more) ED use and these risks increased in the subsequent postpartum periods (within 43–90 and 91–365 days). This continued to be true even

after controlling for factors like race, other medical conditions, and socioeconomic status.

These findings indicate that clinicians should establish robust guidelines for delivering prompt, frequent postpartum care for new mothers with IDD. The study also indicates that clinicians should develop supports for mothers with IDD that meet needs that are distinct from those of the general obstetric population.

Adapted from Monika Mitra, Susan Parish, Ilhom Akobirshoev, Eliana Rosenthal, and Tiffany A. Moore Simas (2018). Postpartum Hospital Utilization among Massachusetts Women with Intellectual and Developmental Disabilities: A Retrospective Cohort Study. Maternal and Child Health Journal. <u>https://doi.org/10.1007/s10995-018-2546-6</u>..

Funding was provided by The National Institutes of Health, Eunice Kennedy Shriver National Institute of Child Health & Human Development (Grant No. R01HD082105). Opinions and findings expressed in this article are the responsibility of the authors and not the National Institutes of Health or the Eunice Kennedy Shriver National Institute of Child Health & Human Development.