

**Pregnancy and Severe Maternal Outcomes: The World Health Organization Multicountry Survey on Maternal and Newborn Health. Obstetrics & Gynecology:**

Santana, Danielly S. MD; Cecatti, José G. PhD; Surita, Fernanda G. PhD; Silveira, Carla PhD; Costa, Maria L. PhD; Souza, João P. PhD; Mazhar, Syeda B. MD; Jayaratne, Kapila MD; **Qureshi, Zahida** MD; Sousa, Maria H. PhD; Vogel, Joshua P. MD; on behalf of the WHO Multicountry Survey on Maternal and Newborn Health Research Network. Twin Pregnancy and Severe Maternal Outcomes: The World Health Organization Multicountry Survey on Maternal and Newborn Health. Obstetrics & Gynecology: April 2016 - Volume 127 - Issue 4 - p 631–641 doi: 10.1097/AOG.0000000000001338

Abstract

**OBJECTIVE:** To evaluate maternal complications (potentially life-threatening conditions, maternal near miss, and maternal death) that are mutually exclusive and severe maternal outcomes (maternal near miss or maternal death) associated with twin pregnancies.

**METHODS:** We performed a secondary analysis of a cross-sectional World Health Organization Multicountry Survey, which was implemented in 29 countries. Data from 4,756 twin deliveries were compared with 308,111 singleton deliveries. Factors associated with maternal morbidity and twin pregnancies were reported with adjusted prevalence ratio (95% confidence interval).

**RESULTS:** Potentially life-threatening conditions, maternal near miss, severe maternal outcomes, and maternal deaths were 2.14 (1.99–2.30), 3.03 (2.39–3.85), 3.19 (2.58–3.94), and 3.97 (2.47–6.38) times higher, respectively, among twin pregnancies. Maternal age older than 20 years, having a partner, multiparity, and elective cesarean delivery were associated with twin pregnancies. Postpartum hemorrhage and chronic hypertension were more frequently associated with severe maternal outcomes among twin pregnancies. Conditions indicating organ dysfunction (maternal near miss) were twofold to fivefold higher for twins. Poisson multiple regression analysis identified several factors independently associated with a severe maternal outcome, but not twin pregnancies.

**CONCLUSION:** Twin pregnancy is associated with greater severe maternal morbidity and a higher rate of maternal death than singleton pregnancy.

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