Use of High-Technology Care Among Women with High-Risk Pregnancies in the United States

OBJECTIVE: Infant mortality has been reduced dramatically with the development of perinatal regionalized high-technology care. Our objective was to assess use of high technology care among women with high-risk pregnancies in the urban and rural United States.

METHODS: The 1988 National Maternal and Infant Health Survey was linked to the 1988 American Hospital Association survey of all obstetrical hospitals. Hospitals were classified into five levels of care based on services and staffing. Women were classified as having high-risk pregnancies using two definitions: (1) gestational age < 34 weeks and birthweight < 1500 g (High Risk I) and (2) the first definition or an antenatal high-risk medical diagnoses (High Risk II). Analyses assessed the proportion of high-risk women delivering in appropriate locations in the rural and urban United States and explored how personal characteristics, insurance status, and use and source of prenatal care influenced where high-risk women delivered.

RESULTS: 71.2% of High Risk I and 55.9% of High Risk II women delivered in a high-technology facility (Level IIA or III). Fifty percent of HRI rural women delivered in tertiary high-technology hospitals and 39% of HRII rural women delivered in a high-technology hospital. High-risk urban women were two to three times more likely to deliver in a high-technology facility compared to their rural counterparts. The multivariate analysis showed that Black high-risk women were more likely to deliver in a high-technology setting and that receipt of prenatal care in a private setting lowered the odds of delivering in a high-technology setting when other factors were controlled.

CONCLUSIONS: In an era where regionalized perinatal care was not threatened by managed care, a large proportion of high-risk women received care in less than optimal settings. Rural high-risk women delivered in high-technology hospitals less often than their urban counterparts. The multivariate analyses implied that the potential barriers to care may be more important among those considered more socially advantaged, who may be more at the mercy of managed care. The current reimbursement environment, which discourages referral to specialists and high-technology care, could result in less access today.

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