JOGNN

IN FOCUS

How Communication Among Members of the Health Care Team Affects Maternal Morbidity and Mortality

Rita Allen Brennan and Carol Ann Keohane

Q9

Correspondence
Rita Allen Brennan, DNP, RNC-NIC, APN/CNS, Women & Children's Services, Northwestern Medicine, Central DuPage Hospital, 25 N. Winfield Rd., Winfield, IL 60190.
rita.brennan@cadencehealth.org

Keywords
communication
morbidity
mortality
nursing
patient safety
perinatal

ABSTRACT

In the United States, rates of severe maternal morbidity and mortality have escalated in the past decade. Communication failure among members of the health care team is one associated factor that can be modified. Nurses can promote effective communication. We provide strategies that incorporate team training principles and structured communication processes for use by providers and health care systems to improve the quality and safety of patient care and reduce the incidence of maternal mortality and morbidity.

JOGNN, ■, ■–■; 2016. http://dx.doi.org/10.1016/j.jogn.2016.03.142

Accepted March 2016

Rita Allen Brennan, DNP, RNC-NIC, APN/CNS, is the Outcomes Manager of the Women & Children's Services Division, Northwestern Medicine, Central DuPage Hospital, Winfield, IL.

Carol Ann Keohane, MS, BSN, RN, is the Assistant Vice President in the Patient Safety Department, Crico Risk Management Foundation, Cambridge, MA.

The authors report no conflict of interest or relevant financial relationships.

Rates of severe maternal morbidity and mortality have escalated in the past decade. *Severe maternal morbidity* is defined as a potential life-threatening maternal condition or complication (Centers for Disease Control and Prevention, 2015b). In the United States, the Centers for Disease Control and Prevention (2015b) reported a statistically significant increase of 26.1% in the rate of severe maternal morbidity from 2008–2009 to 2010–2011. Likewise, the maternal mortality rate rose from 14.5 per 100,000 live births in 2006 to 17.8 per 100,000 live births in 2011 (Centers for Disease Control and Prevention, 2015a). Worldwide, the World Health Organization (2015) noted an overall reduction in maternal mortality from 1990 to 2015, and although a global decline is encouraging, many of these deaths were preventable.

Risk factors have been identified for severe maternal morbidity and mortality. Say et al. (2014) found that hemorrhage, hypertensive disease, and sepsis contributed to more than half the maternal deaths worldwide. Investigators who conducted a population-based study in Washington State identified several nonmodifiable risk factors such as age, race, extremes of parity, and preexisting comorbidities that contribute to severe maternal morbidity (Gray, Wallace, Nelson, Reed, & Schiff, 2012). They concluded that because the risk factors identified are not modifiable at the individual level, provider and system-level factors may be the most appropriate target to prevent maternal morbidity.

Expert Panel

The increase in the rates of maternal morbidity and mortality in the United States is a concern for all perinatal providers, including perinatal nurses. In September 2014, the Association of Women's Health, Obstetric and Neonatal Nurses and the Association of Maternal & Child Health Programs convened an expert panel to evaluate and track how nurses affect rates of maternal mortality and morbidity. The specific purposes of this expert panel were to (a) improve methods to track the ability of nurses to affect the rising trends in maternal mortality and morbidity in the United States; (b) identify opportunities to collect data from state-based maternal mortality reviews that can be used to inform the development of

FLA 5.4.0 DTD ■ JOGN112_proof ■ 16 September 2016 ■ 5:52 am ■ ce

Communication failure is the second leading root cause factor in maternal sentinel events.

effective strategies and tactics to improve the quality of care women receive before, during, and after pregnancy; and (c) identify strategies that incorporate team training principles and structured communication processes for use by providers and health care systems to improve the quality and safety of patient care and ultimately reduce maternal mortality and morbidity.

The panel identified these areas in need of improvement: communication among team members, such as provider to provider and provider to patient; communication within systems, such as paging, mobilizing others, and hierarchy; team training; trust among team members; and documentation of interdisciplinary communication. The panel recognized that some components of care, such as vital signs and other clinical assessments, are captured in the medical record, but other elements, such as the escalation of concern related to care, are not always noted. Therefore, they identified the need to evaluate the extent to which nurses felt empowered to communicate concerns and escalate care when necessary. In this article, we address one of the outcomes from this panel.

Communication Failure as a Root Cause for Morbidity and Mortality

In a review of 125 maternal events that resulted in death or permanent loss of function that occurred between 2004 and 2014 and were reported to The Joint Commission, failure in communication was a factor in 60, which placed communication as the second leading root cause factor; the first was human factors (The Joint Commission, n.d.). These findings are similar to earlier findings reported by The Joint Commission in which poor communication was identified as the leading contributing factor in perinatal deaths and injuries (>70% of the 47 cases reviewed; The Joint Commission, 2004).

Despite increased awareness in the health care community about preventable errors, reports indicate that they still occur at alarming rates. In a recent analysis of more than 19,000 closed medical malpractice claims (CRICO Comparative Benchmarking System Analysis, 2013), approximately 6% included obstetric-related claims. Of the obstetric-related claims, more than 60% resulted in a high-severity injury, and 19% of these cases involved a maternal claimant. Twenty-five percent of the maternal claimant cases were related to maternal hemorrhage, a known leading cause of maternal morbidity and mortality.

Communication issues, most notably between providers, were identified in 41% of cases and included the lack of timely acknowledgment and effective communication. Other factors were the lack of appreciation for clinical significance or decline, variation in willingness to escalate concerns about care, and poor communication due to lack of team structure and function that often led to delays in care management and effective response (unpublished data, CRICO Comparative Benchmarking System Analysis, 2013).

Although malpractice claims are often referred to as the tip of the iceberg that represents a fraction of untoward events, a review of the underlying influences presented in these cases offers rich insight into clinically specific risk areas such as obstetrics. Understanding the barriers to effective communication can provide important opportunities for the development of targeted prevention strategies.

What Is Effective Communication?

Effective communication, inclusive of escalation protocols, is paramount to the delivery of safe, reliable care; however, communication failures in perinatal settings are complex and often influenced by myriad factors, including issues related to hierarchy, distractions, personality, and even differing views on optimal care management (Lyndon, Zlatnik, & Wachter, 2011). In their work on interprofessional communication in labor and birth units, Lyndon et al. (2011) indicated that "chronic communication breakdowns often result from differing 'world views'" (p. 95; e.g., risks/benefits of oxytocin) and strained relationships between providers. There is a constant struggle among members of the clinical team to speak up and raise concerns, which can result in delays in decision making and mobilization of appropriate resources.

Effective communication in an unpredictable health care setting can be a challenge. Dingley et al. (2008) identified the following interrelated dynamics that can influence effective

FLA 5.4.0 DTD ■ JOGN112_proof ■ 16 September 2016 ■ 5:52 am ■ ce