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Implementing an Obstetrics-Specific Triage Acuity Tool to Increase Nurses' Knowledge and Improve Timeliness of Care

Heather Quaile

ABSTRACT

Objective: To implement an obstetrics-specific triage acuity tool called the Maternal Fetal Triage Index (MFTI) in two maternity units, test the change in nurses' knowledge of triage assessment, and improve timeliness of care.

Design: A quality improvement project that included pre- and posttesting of nursing knowledge using the MFTI and measuring the difference in time based on time stamps from pregnant women's intake sheets.

Setting/Local Problem: Two hospitals that are part of a large multi-campus hospital system in the Southeastern United States.

Participants: Obstetric triage nurses who have worked in obstetrics for more than 2 years.

Intervention/Measurements: Participants watched a clinical module about the MFTI and took a pretest; then, 2 months after implementation of the MFTI, they took a posttest. Comparisons of means of the tests were analyzed for a knowledge increase. A retrospective analysis of pre-implementation triage times was conducted using chart reviews from the previous year. This time was then compared with the weekly mean times on the patient flow sheets to assess for timeliness of care.

Results: Participants received the educational session, took a pretest, and followed up with completion of a posttest 2 months later. There was an increase in nursing knowledge from a pretest mean score of 79% to a posttest mean score of 95%. Once the MFTI was implemented, timeliness of care improved; the result was a pre-implementation mean time of 19 minutes compared with a post-implementation mean time of 10.4 minutes.

Conclusion: The educational sessions effectively increased nursing knowledge, and the timeliness of care component showed an improvement from pre- to post-implementation time.

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KEYWORDS: acuity, Maternal Fetal Triage Index, nursing knowledge, obstetric triage, obstetrics-specific triage acuity tool, pregnant, timeliness of care, triage

CLINICAL IMPLICATIONS

- OB triage is vital; however, there is inconsistency in the practice of assigning triage acuity and no standardized tool to assign acuity to pregnant women when they arrive at the hospital.
- A well-developed obstetrics-specific triage acuity tool could help nurses prioritize obstetric care and could give hospitals a consistent method to assign acuity to each pregnant woman in triage.
- The use of standard workflows and acuity indexes can benefit the nursing profession by creating standards and expectations.
- With education of the latest evidence guiding care of pregnant women during OB triage, labor and delivery nurses have the opportunity to positively affect maternal and fetal outcomes.
- For the successful implementation of a project like this, the collaboration of very experienced and well-informed team members from multiple disciplines is required.

The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) defines obstetric (OB) triage as "the brief, thorough, and systematic maternal and fetal assessment performed when a pregnant woman presents to care to determine priority for full evaluation" (AWHONN, 2014, p. 16). In the early 1980s, OB triage became more common in the United States as a result of increased financial constraints on hospitals, a personnel shortage, and the strain on environmental services and other valuable hospital resources (Angelini & Howard, 2014; Angelini & LaFontaine, 2012; Angelini, Zannieri, Silva, Fein, & Ward, 1990). Performed by nurses, OB triage is a "process, not a place" (AWHONN, 2011, p. 7).

Women who present for OB triage are not considered in certain staffing ratios; however, they represent a significant amount of volume and nurse staffing hours in many perinatal units (AWHONN, 2011). A hospital with a large volume of births may have 1.2 to 1.5 times more women present to OB triage for a screening examination and emergency care; therefore, this OB triage volume typically exceeds the overall birth volume of a hospital by 20% to 50% (AWHONN, 2011; Paisley, Wallace, & DuRant, 2011).

Clinical Problem and Need for a New Protocol

OB triage is a multidisciplinary specialty within the labor and delivery unit. It is comparable to an emergency department with unpredictable census, chief complaints, and unexpected challenges. OB triage is vital; however, there is inconsistency in the practice of assigning triage acuity and no standardized tool to assign acuity to pregnant women when they arrive at the hospital (Paisley et al., 2011). Before the inception of AWHONN's Maternal Fetal Triage Index (MFTI), only a few hospitals in the United States were implementing an obstetrics-specific triage acuity tool (Angelini & LaFontaine, 2012; Ruhl, Scheich, Onokpise, & Bingham, 2015a, 2015b). A large multi-campus hospital system in the Southeastern United States had no obstetrics-specific triage acuity tool. The entire hospital system had a high census volume with increased waiting room times and a high-risk population. However, for the purpose of this project, data from only two hospitals in the system were analyzed. In these two hospitals there was a lack of triage nurse education and competencies and a need for clearly defined process time targets for women presenting for triage. Additionally, there was no method with which to provide consistent feedback to clinicians about these women, which could, in turn, compromise the safety and quality of their care.

Background and Significance

Evidence indicates that a well-developed obstetrics-specific triage acuity tool could help nurses prioritize obstetric care and could give hospitals a consistent method of assigning acuity to each pregnant woman in triage (Angelini & Howard, 2014). Such an easily accessible, evidence-based tool would allow team members to decrease errors, use the limited nursing staff more efficiently, decrease women's prolonged wait times, and communicate more effectively (Paisley et al., 2011). Without the use of an obstetrics-specific triage acuity tool, there is an increase in clinical concern for the woman and her fetus and a greater incidence of fetal and maternal complications and even mortality (Angelini & Howard, 2014; Angelini & LaFontaine, 2012). Accuracy in triage is critical and can ensure that resources of families and of health care systems are used in an optimal manner (Angelini & Mahlmeister, 2005; Clark, Belfort, Dildy, & Meyers, 2008).

When a pregnant woman presented to the obstetric unit for labor- and non–labor-related concerns, she was usually assessed by an experienced obstetric nurse and assigned an acuity level. She was then transferred to the labor unit or managed and discharged appropriately. When done properly, this process reduced hospital wait times, increased maternal satisfaction, and improved communication among team members, which limited unnecessary admissions and eliminated the cost of expensive labor rooms (Paisley et al., 2011).

The cost-effectiveness of an obstetric screening tool and the subsequent increase in satisfaction were shown in one study in which the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey instrument and data collection methodology were used (Nelson, n.d.). The score on the HCAHPS is key for hospital reimbursement; hence, use of an obstetrics-specific triage acuity tool could lead to positive financial outcomes for a hospital (Nelson, n.d.). An obstetrics-specific triage acuity tool would help nurses make sound, evidence-based clinical decisions

Heather Quaile, DNP, APRN, WHNP-BC, is the Lead Nurse Practitioner at Vivos Women's Health in Marietta, GA. The author reports no conflicts of interest or relevant financial relationships. **Address correspondence to:** heather.quaile@vivoswomen.com.

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