

Using a Preeclampsia Assessment Tool to Enhance Self-Efficacy in Postpartum Nurses

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Background

- Preeclampsia and its complications are increasingly common
 - Affects one in ten pregnancies in the US
 - Highest rates amongst non-White minorities
 - Complications include seizures, stroke, organ damage, and death
 - Most deaths occur 0-7 days postpartum
- Many deaths are preventable with early recognition and treatment
 - Delays result from:
 - Inconsistent assessment guidelines
 - Knowledge deficits in the healthcare team
 - Implicit racial bias
- California Maternal Quality Care Collaborative (CMQCC) Preeclampsia Toolkit
 - Includes the Preeclampsia Early Recognition Tool (PERT)
 - Evidence-based guideline that standardizes assessment for preeclampsia
 - May minimize delays, promote consistency, and make care more equitable
 - Use is well-supported during pregnancy & delivery, but not well-studied for postpartum

Purpose & Aims

Purpose Statement:
The purpose of this project was to improve postpartum nurses' confidence in assessing for, recognizing, and reporting signs of postpartum preeclampsia using a standardized assessment tool

- Specific Aims:**
1. Postpartum nurses will report a significant increase in self-efficacy with recognizing preeclampsia early warning signs after completing an educational e-module, as evidenced by pre-post intervention survey.
 2. Postpartum nurses will demonstrate proficiency in using a standardized preeclampsia assessment tool, the PERT, as evidenced by correctly scoring patient case scenarios $\geq 80\%$ of the time.
 3. The PERT will be added to the electronic health record obstetric toolkit as a reference for healthcare staff.

Methods

Setting & Sample:

- Single 29-bed postpartum unit within urban community hospital
- Forty postpartum nurses, comprising all regular staff of single postpartum unit
- Enrolled in project interventions as part of annual competency training

- Interventions by Aim**
1. Educational e-module based upon CMQCC Preeclampsia Toolkit education slide set
 - Pre-post intervention self-efficacy survey
 - Twelve-item survey on a Likert scale
 2. Skills workshop with application of PERT to two patient case scenarios
 - Scoring accuracy used as proxy measure for proficiency

Teaching postpartum nurses to assess for preeclampsia with a standardized tool improves their self-efficacy.



Scan code for abstract, tools, and references.

Results

Aim 1

Demographics:
Female, BSN, varying experience

Change in mean self-efficacy:
 $M=3.6$, $SD 3.5$, $p=.000$

Gains:
Recognizing abnormal assessment findings
Identifying PEC risk factors
Understanding relevant lab values

Aim 2

- Nurse participants: $n=37$ (97.3%)
- Observed scoring accuracy **below goal (58.1%)**
- Workshop design not conducive to assessing subjective data, like headache severity
- Anecdotal feedback

	Total Responses, n	Accurate Responses, n (%)
Case 1	37	23 (62.2)
Case 2	37	20 (54.1)
Overall		43 (58.1)

“ I wish I could could ask the patient follow-up questions ”

Anecdotal feedback from workshop

Aim 3

- On hold given insights gleaned from Aim 2

Conclusions

- The postpartum period presents distinct risks that can be mitigated through standardized preeclampsia assessment and role-specific training for postpartum nurses.
- This project demonstrated that it is possible to improve postpartum nurses' self-efficacy in assessing for preeclampsia using an e-module based.
- Project findings support the need for postpartum-specific preeclampsia training and infer credibility to the e-module as a training tool.
- PERT workshop results and anecdotal feedback from nurses suggest a more interactive environment, such as a simulation, may better prepare nurses to use the PERT.

Sustainability & Dissemination: Results of this project will be shared with the hospital-wide Practice Council and at the Perinatal Safety Meeting. Stakeholders support expansion of the intervention to the Emergency Department, where postpartum women may present post-discharge.

See QR code for References