
PRENATAL AND POSTPARTUM PATIENT COUNSELING OR EDUCATION*

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BACKGROUND

Interventions for women with preeclampsia in the prenatal period include increased monitoring, magnesium sulfate, antihypertensive medications and corticosteroids for fetal lung maturation, if indicated. To maximally benefit from these resources, however, women must first seek medical care in a timely fashion.¹

Women are less likely to seek care if they do not understand the signs and symptoms of preeclampsia. Several recent studies emphasized the value of educating mothers and providers to report signs and symptoms of severe preeclampsia that commonly precede eclampsia, hypertensive encephalopathy, pulmonary edema or stroke.²⁻⁸ These recommendations are further supported by studies showing women who are diagnosed with preeclampsia, and receive timely and proper monitoring, have fewer adverse events than those with delayed diagnosis.⁴ This knowledge deficit appears modifiable, regardless of literacy level or initial understanding of preeclampsia, as pregnant women who had acknowledged receiving information about the disease, demonstrated greater preeclampsia-specific knowledge.⁹

Further, many clinicians and patients are unaware that preeclampsia can either occur or persist following delivery. It is also important to remember that the natural progression of postpartum hypertension includes an initial decrease in blood pressure (BP) within 48 hours, but BP rises again between three to six (3-6) days postpartum.¹⁰ Preeclampsia may occur up to six (6) weeks postpartum.^{11,12} Postpartum hypertension/preeclampsia is either secondary to persistence or exacerbation of hypertension in women with previous gestational hypertension, preeclampsia, chronic hypertension or because of *de novo* (new onset) condition. In cases of late postpartum eclampsia, researchers found that nearly all of the patients had at least one prodromal symptom and half had more than one symptom that heralded the eclamptic seizure. Only 33% of women sought care for their symptoms, suggesting a need for proper patient education which may have led to better outcomes.³

KEY LEARNING POINTS

1. Many women have a limited understanding of preeclampsia, its signs and symptoms and its danger to both the mother and baby.¹
2. Lack of understanding of preeclampsia and its prodromal symptoms is even more profound among women with low literacy levels.¹³
3. Health care providers may often overlook patients' complaints that in retrospect were predictors of increased risk or evidence of disease.
4. There is currently minimal education for a postpartum mother regarding preeclampsia at discharge from the hospital.
5. Many hospitals have discharge paperwork for obstetric patients that include warning signs that should be reported to their doctors or that require immediate evaluation at a hospital. Symptoms of preeclampsia should be included in that list.
6. Many hospitals now also include videos on matters relating to new mothers that they may watch prior to discharge. These videos provide both a verbal and visual way to reinforce the warning signs of preeclampsia and what and when women need to communicate with their doctors.¹⁴
7. New mothers may often disregard symptoms since they may not know what they "should" be feeling postpartum. Family members are key partners in preventing maternal deaths by intervening when their spouse or partner complains of shortness of breath, relentless headache and other concerning symptoms.

RECOMMENDATIONS FOR QUALITY IMPROVEMENT:

1. A clear and simply written list of patient symptoms should be shared with expectant mothers and attending family members during prenatal visits and upon discharge from the hospital.^{9,15}
2. A pictogram (Figure 1) showing the symptoms in visual format can be helpful to those women with language barriers or who may be struggling to understand the physician's instructions regarding preeclampsia.^{16,17}
3. Physicians and nurses should ask open-ended questions to ensure that the patient understands what they have been told. For example, after going over a list of symptoms say, "We've gone over a lot of information today. What would make you call or come in to the hospital?"¹⁸⁻²²

4. Hospitals with video education abilities should include a video on preeclampsia for patient education.
5. Women who have experienced preeclampsia prior to delivery or while in the hospital should see their OB within one week if they are on medication or two weeks if they are not on medications after discharge. A postpartum clinic visit should be established prior to discharge.
6. Women who have experienced preeclampsia prior to delivery or while in the hospital should be encouraged to monitor their blood pressure at home with instructions to call their physician if their pressures reach or exceed 140/90.
7. It is recommended that all patient discharge instructions (verbal and written) should include recognition of and response to preeclampsia symptoms that nurses review these instructions with the patient and her family prior to discharge.

Figure 1. Preeclampsia Foundation Signs and Symptoms Information Sheet

Preeclampsia symptoms can be conveyed via a pictorial information sheet.¹³
(Note: This is available from the Preeclampsia Foundation for a modest shipping and handling fee. A Spanish version is also available.)

Ask Your Doctor or Midwife

Preeclampsia

What Is It?

Preeclampsia is a serious disease related to high blood pressure. It can happen to any pregnant woman.

Risks to You

- Seizures
- Stroke
- Organ damage
- Death


Risks to Your Baby

- Premature birth
- Death

Signs of Preeclampsia



Stomach pain



Headaches




Feeling nauseous; throwing up



Seeing spots



Swelling in your hands and face



Gaining more than 5 pounds in a week

What Should You Do?

Call your doctor right away. Finding preeclampsia early is important for you and your baby.

For more information go to www.preeclampsia.org

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REFERENCES

1. You W, Wolf M, Bailey S, et al. Factors associated with patient understanding of preeclampsia. *Hypertension in Pregnancy*. 2012;31(3):341-349.
2. Ogunyemi D, Benai J, Ukatu C. Is preeclampsia preventable? A case control review of consecutive cases from an urban underserved region. *South Med J*. 2004;97:440-445.
3. Chames M, Livingston J, Ivester T, Barton J, Sibai B. Late postpartum eclampsia: a preventable disease? *Am J Obstet Gynecol*. 2002;186:1174-1177.
4. Menzies J, Magee L, Li J, et al. Instituting surveillance guidelines and adverse outcomes in preeclampsia. *Obstet Gynecol*. 2007;110:121-127.
5. Sauve N, Powrie R, Larson L, et al. The impact of an educational pamphlet on knowledge and anxiety in women with preeclampsia. *Obstet Med*. 2008;1:11-17.
6. Matthys L, Coppage K, Lambers D, Barton J, Sibai B. Delayed postpartum preeclampsia: an experience of 151 cases. *Am J Obstet Gynecol*. 2004;190:1464-1466.
7. Filetti L, Imudia A, Al-Safi Z, Hobson D, Awonuga A, Bahado-Singh R. New onset delayed postpartum preeclampsia: different disorders? *J Matern Fetal Neonatal Med*. 2012;Jul(25(7)):957-960.
8. Al-Safi Z, Imudia A, Filetti L, Hobson D, et al. Delayed postpartum preeclampsia and eclampsia: demographics, clinical course, and complications. *Obstet Gynecol*. 2011;118(5):1102-1107.
9. Goldenberg RL, McClure EM, Bhattacharya A, Groat TD, Stahl PJ. Women's perceptions regarding the safety of births at various gestational ages. *Obstet Gynecol*. Dec 2009;114(6):1254-1258.
10. Sibai BM. Etiology and management of postpartum hypertension-preeclampsia. *Am J Obstet Gynecol*. Jun 2012;206(6):470-475.
11. Lubarsky S, Barton J, Friedman S, et al. Late postpartum eclampsia revisited. *Obstet Gynecol*. 1994;83:502-505.
12. Sibai B. Diagnosis, prevention, and management of eclampsia. *Obstet Gynecol*. 2005;105(2):402-410.
13. You W, Wolf M, Bailey S, Grobman W. Improving patient understanding of preeclampsia: A randomized controlled trial. *Am J Obstet Gynecol*. 2012;206(5):431.e431-435.
14. Wilson E, Park D, Curtin L, et al. Media and memory: the efficacy of video and print materials for promoting patient education about asthma. *Patient Educ Couns*. 2010;80:393-398.
15. Freda M, Damus K, Merkatz I. Evaluation of the readability of ACOG patient education pamphlets. ACOG. *Obstet Gynecol*. 1999;May(93(5 Pt 1)):771-774.
16. You WB, Wolf MS, Bailey SC, Grobman WA. Improving patient understanding of preeclampsia: a randomized controlled trial. *American Journal of Obstetrics and Gynecology*. May 2012;206(5):431 e431-435.

17. MacGillivray I, McCaw-Binns A, Ashley D, Fedrick A, Golding J. Strategies to prevent eclampsia in a developing country: II. Use of a maternal pictorial card. *Int J Gynaecol Obstet.* 2004;87:295-300.
18. American Medical Association. Proceedings of 2005 White House Conference on Aging, Mini-Conference on Health Literacy and Health Disparities. 2005; <http://www.ama-assn.org/go/aging>. Accessed June 14, 2013.
19. Institute of Medicine Health Literacy. *A Prescription to End Confusion*. Washington, DC: Institute of Medicine 2004.
20. Ratzan S, Parker R. *National Library of Medicine Current Biographies in Medicine: Health Literacy*. Bethesda, MD: NCM;2000.
21. The American Medical Association Foundation. Health Literacy and Patient Safety: Help Patients Understand. Reducing the risk by designing a safer, shame-free health care environment. 2007; http://www.ama-assn.org/resources/doc/ama-foundation/hl_monograph.pdf. Accessed December 7, 2011, 2007.
22. Doak C, Doak L, Root J. Teaching Patients with Low Literacy Skills,. *American Journal of Nursing.* 1996;96(12):16M.