Identifying Preeclampsia through Patient Education: A Quality Improvement Initiative

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Introduction

- Preeclampsia is a condition experienced by women during pregnancy and/or the first six weeks after delivery.
- It has been categorized among the third top cause of severe maternal morbidity, maternal mortality and adverse neonatal outcomes, both in the United States and globally.
- In the United States, preeclampsia accounts for 18.2% of maternal mortality.
- It accounts for over 70,000 maternal deaths per year and over 500,000 infant deaths per year worldwide.
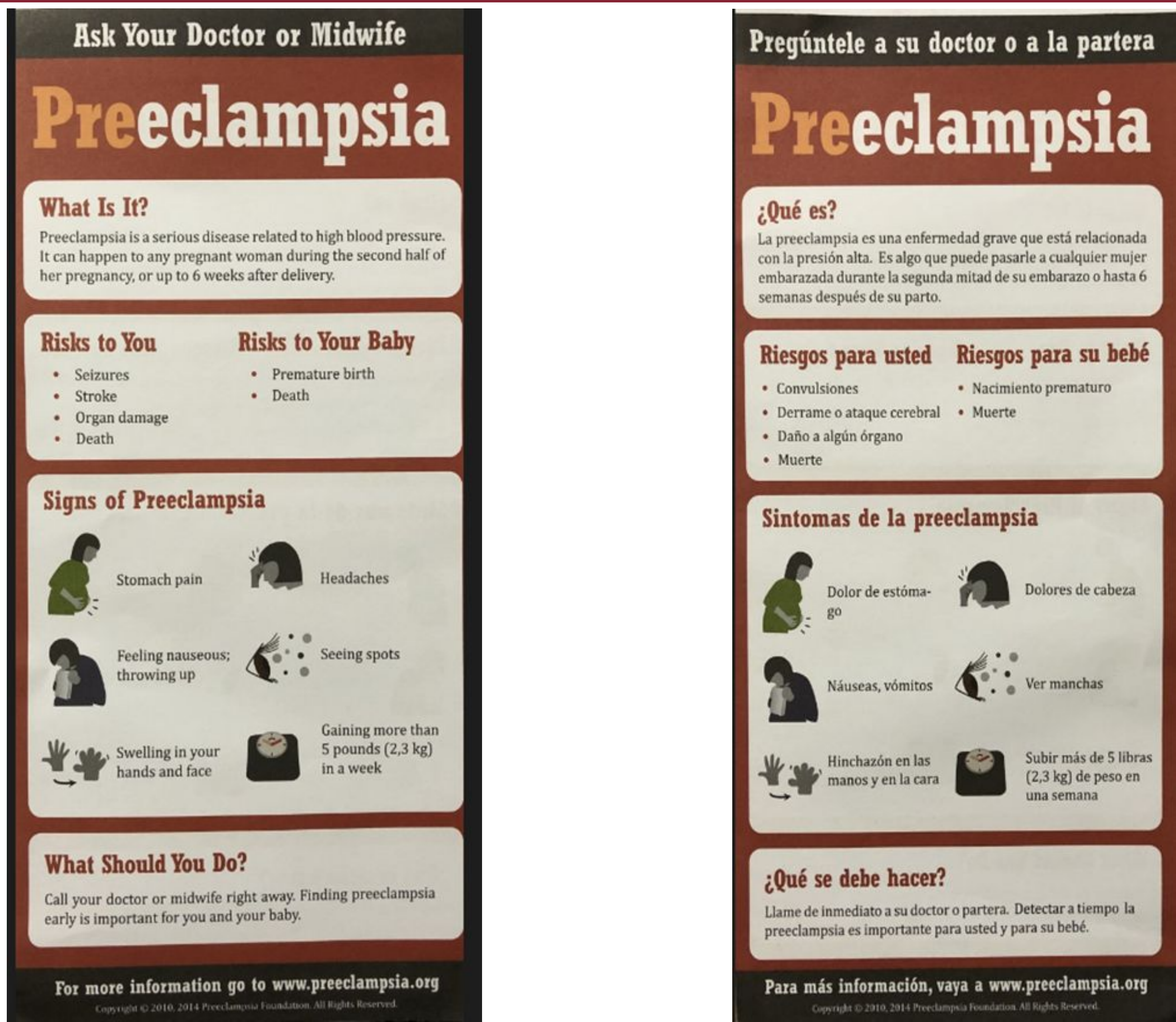
PICO Statement

In a Southwest County hospital, will educating patients and support persons that accompany patient to clinic visits increase awareness of early signs and symptoms of preeclampsia?

Objectives

- To educate pregnant women between 14 weeks gestation and 42 weeks gestation and their support persons on the early signs and symptoms of preeclampsia.
- To increase the knowledge of signs and symptoms of preeclampsia in pregnant women and support persons by an average of 20% measured by a pretest and posttest.
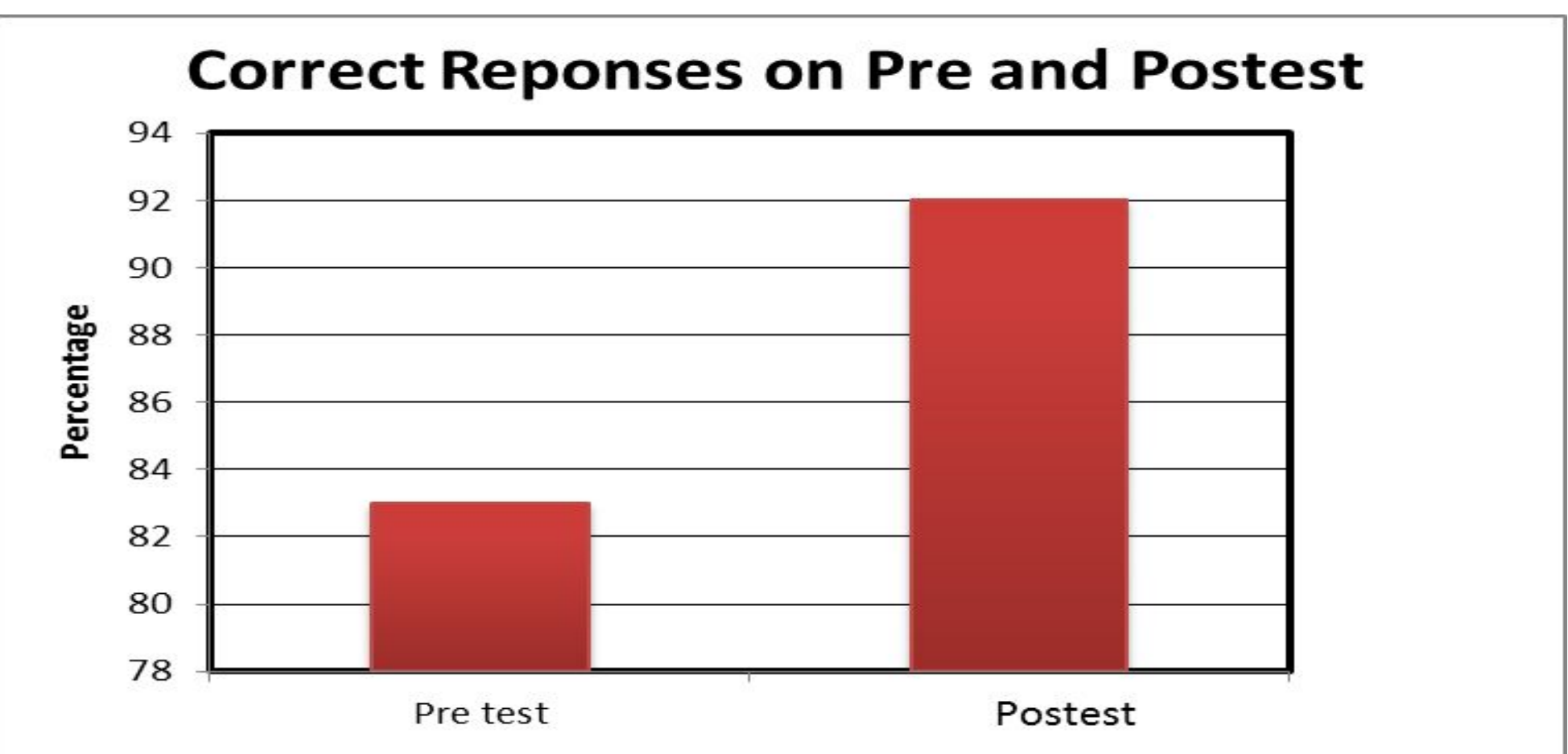
Intervention

Discussion

- Target population for this initiative is pregnant women between ages 18-45 years old in their second or third trimester of pregnancy and the support person that accompanies them to their clinic visits.
- Inclusion criteria also include the support persons. Support persons can be male or female over age 18 who speaks English or Spanish.
- Exclusion criteria for the target population is any patient in the first trimester, any patient under the age of 18, individuals that do not speak English or Spanish, and support persons under the age of 18 years old.
- A sample size of 80 achieves 80% power to detect a mean of paired differences of 0.2 (pre: 0.20 post: 0.40) with an estimated standard deviation of differences of 0.6 and with a significance level (alpha) of 0.05 using a two-sided paired t-test.
- Limitations of the project were English and Spanish speaking patients only, patient seeking medical attention in an underserved population, and the inability to make sure all the staff at the facility were consistent when implanting this intervention.

Outcomes

- 89% of female participants and 11% of male participants
- 52% were English speaking and 48% were Spanish speaking
- 46% of the participants was in their second trimester where as 54% were in the third trimester of pregnancy
- Expected Outcome- 20% increase of knowledge of early signs and symptoms of preeclampsia
- Actual Outcome- 9% increase of knowledge of early signs and symptoms of preeclampsia

Correct Reponses on Pre and Postest

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre correct percentage	.8280	100	.16822	.01682
Post correct percentage	.9200	100	.17056	.01706

DNP Essentials

Essential I	Scientific Underpinnings for Practice
Essential II	Systems Thinking, Healthcare Organizations, Global Health, and the Advanced Practice Nurse Leaders
Essential III	Clinical Scholarship and Evidence-Based Practice
Essential VI	Interprofessional Collaboration for Improving Patient and Population Health
Essential VII	Clinical Prevention and Population Health for Improving the Nation's Health
Essential VIII	Advanced Nursing Practice for Specialty Roles

References