Perception of Access to Prenatal Care of Women Presenting to the Emergency Department During the First Trimester of Pregnancy

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Abstract

Background: Despite the large amount of research regarding prenatal care (PNC) in physicians' offices, hospital outpatient clinics, and community health centers, there is a great paucity of information regarding the role the Emergency Department plays in PNC. Objective: To understand the factors associated with pregnant women's choice to seek prenatal care in the Emergency Department. Methods: This study is an investigative examination of the attitudes towards and perceived barriers to PNC of women in the first trimester of pregnancy presenting to the Emergency Department of an urban level 1 trauma center. Survey questions examined demographic information and patient factors, such as how they found out about the pregnancy, if they had a doctor for this pregnancy, use of PNC in prior pregnancies, and whether they would utilize first trimester PNC in the future. Additionally, the survey contained a series of statements about the importance of PNC and factors affecting their utilization as rated on a 5 point Likert scale. All data was abstracted and coded into Excel. Descriptive statistics and 95% confidence intervals were calculated. Logistic regression was used to predict future PNC use. Results: A total of 74 patients who met the inclusion criteria were surveyed. Ninety-three percent (CI 94-97%) knew they were pregnant prior to presenting to the ED. Thirty-seven percent (CI 27-50%) had a prenatal visit prior to the index ED visit. Twelve percent (CI 6-22%) reported they were at the ED for PNC, 70% (CI 55-85%) for another OB/GYN issue, and 18% (CI 10-26%) for a reason unrelated to pregnancy. However, 22% strongly agreed and 8% agreed that if they had PNC they would not have come to the ED that day. Predictors of future PNC use included knowledge of pregnancy prior to ED visit, number of pregnancies, belief that PNC is important for the mother's health, knowledge of where to receive PNC, and belief that taking prenatal vitamins during pregnancy can help the baby. Conclusions: For the population of pregnant females presenting to an urban level 1 trauma emergency department during the first trimester of pregnancy, a large proportion (30%) reported they would not have come to the ED if they received PNC. This would represent a significant reduction in ED visits per year if these women received appropriate services. Future research would need to further delineate the perceived barriers to PNC in this population.

Introduction

• Up to 20% of pregnant women do not receive first trimester prenatal care.1
• Prenatal care has been found to reduce infant mortality and decrease the rate of preterm deliveries even if only one prenatal visit occurs.2,3
• Premature delivery is significantly reduced when prenatal care is initiated during the first trimester versus after.2
• Factors associated with late or no prenatal care include:
  - Low education level
  - Age less than 20 years old or greater than 35 years old
  - Multiparity
  - African American or Hispanic origins
  - Residence in an area with low prenatal care providers
• Common barriers to access were:
  - Transportation
  - Low motivation of the mother
  - Finances
  - Needs of existing children
  - Problems with prenatal clinics such as limited hours, location, long wait times, inability to bring children to clinic, and language spoken by staff.5
• Paramount to understanding the role of the ED in PNC will be ascertaining whether these women have already seen another physician for PNC and whether they believe the ED is an adequate substitute for regular PNC.

Methods

Goals: To examine the attitudes towards and perceived availability of PNC among women presenting to the ED during the first trimester of pregnancy. To look for ways to improve PNC utilization in this subset of pregnant women.

Study: Questionnaire-based examination of the attitudes towards and perceived barriers to PNC of women in the first trimester of pregnancy presenting to the Emergency Department at an urban level 1 trauma center.

Participants: 74 patients who met the inclusion criteria were surveyed. Patients were identified as potential participants by either self-report of pregnancy or abdominal or pelvic complaints in women of child bearing age.

Inclusion criteria: confirmation of pregnancy with a positive serum or urine pregnancy test and an estimated gestational age of 12 weeks or less by last menstrual period.

Exclusion criteria: women outside of the first trimester of pregnancy or negative pregnancy test in the ED.

Surveyors: Questionnaires were administered by either the lead investigator or an EM research assistant.

Data: Analysis was abstracted and coded into Excel. Descriptive statistics and 95% confidence intervals were calculated. Logistic regression was used to predict future PNC use and correlate with past PNC use in the subset of multiparous patients.

Results

Table 1: Demographic characteristics of survey population with "P" values calculated for PNC in future pregnancies as the outcome and "R" values for PNC in previous pregnancies as the outcome.

Table 2: Potential risk factors of survey population with "P" values calculated for PNC in future pregnancies as the outcome and "R" values for PNC in previous pregnancies as the outcome.

Discussion and Conclusions

• Adjusting for age, ethnicity, and education revealed several additional significant relationships with past PNC use, including the patient's reported reason for the visit, the number of pregnancies, the belief that PNC is important for the mother, and the statement that they would receive PNC if health workers spoke their language.
• Many risk factors for poor PNC use from studies of doctor offices and clinics were not reproduced, most likely due to smaller sample size and lack of patient heterogeneity.
• Common barriers to PNC reported by women in prior studies were not reproduced. Survey questions did not adequately address women's perception of these factors as barriers to access.
• A decent proportion (30%) reported they would not have come to the ED if they received PNC. This extended beyond those who actually reported they were at the ED for PNC (12%) and would represent a significant reduction in ED visits per year if these women received appropriate services.

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