

**POPINVITED: ID# 101822**

**Title:**

The Role of an Obstetric Navigator in Supporting the Pregnant Adolescent

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**ACCEPTED**

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**Session Title:**

Maternal-Child Health Nurse Leadership Academy (MCHNLA)

**Slot:**

MCH: Sunday, 17 November 2019: 11:45 AM-12:15 PM

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**Applicable Category:**

Clinical

**Keywords:**

Adolescent Pregnancy, Maternal Child Health and Obstetrical Navigator

**References:**

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### **Abstract Summary:**

Adverse neonatal outcomes are more likely in adolescent pregnancies. This project demonstrates the role of an obstetrical navigator in the care team of pregnant adolescents in improving neonatal outcomes.

### **Content Outline:**

1. Introduction
  1. Pregnant adolescents (19 years and younger) are a vulnerable population
  2. Adverse neonatal outcomes are more likely in adolescent pregnancies

## 2. Body

### 1. Adolescent pregnancy

1. Pregnant adolescents are more likely to experience adverse perinatal and neonatal outcomes
2. Adverse neonatal outcomes include preterm delivery and low birthweight neonates

### 2. Adolescent focused obstetric care

1. Programs specifically tailored to pregnant adolescents are associated with improved outcomes for adolescent mothers and their neonates
2. Support during pregnancy is critical for pregnant adolescents

### 3. Patient navigation

1. Used in various healthcare settings to bridge gaps in care across healthcare disciplines
2. In the obstetrical setting, navigators can assist with scheduling prenatal and postpartum visits, prenatal education, supporting breastfeeding, and connecting patients with specialists

## 3. Conclusion

1. Patient navigators have a role in the care of obstetrical patients
2. More research is needed to determine if navigators can improve outcomes among pregnant adolescents

### **Topic Selection:**

Maternal-Child Health Nurse Leadership Academy (MCHNLA) (25199)

### **Abstract Text:**

Pregnant adolescents (19 years and younger) are a vulnerable population. They face obstacles in care and an increased risk for adverse outcomes. By supporting the leadership of nurses and the development of projects designed to help underserved childbearing women and children, the Maternal-Child Health Nurse Leadership Academy (MCHNLA) aims to improve the health of vulnerable populations, such as pregnant adolescents, by positively impacting quality of care and health outcomes. The MCHNLA program is a collaborative effort in partnership with Johnson & Johnson.

### **Background**

#### **Adolescent Pregnancy**

Research suggests adverse neonatal outcomes are more likely in adolescent pregnancies. Several large multicountry studies, including one study in the United States (US), found adverse perinatal outcomes were increased among pregnant adolescents. The studies included more than four million pregnant

women during a time frame from the early 1980s until the end of 2013. The studies were consistent in finding preterm labor and low birthweight in pregnant adolescents. Additionally, adolescents less than 16 years old generally have an even greater risk of delivering low birthweight and preterm newborns.

### **Adolescent Focused Obstetric Care**

Several studies have examined ways to reduce the risks associated with adolescent pregnancy. Programs specifically tailored to pregnant adolescents are associated with improved outcomes for adolescent mothers and their neonates. Support during pregnancy is a critical factor for pregnant adolescents. Research suggests adolescent-focused prenatal care through programs such as centering pregnancy models, group prenatal care, and school based programs, for example, had better obstetrical outcomes than adolescents receiving traditional prenatal care.

### **Patient Navigation**

Patient navigators are used in various healthcare settings to assist patients. The role and scope of patient navigators is discussed in the literature and varies across disciplines. In obstetrics, the literature suggests the role of patient navigators can include helping schedule prenatal and postpartum visits, facilitating prenatal education, supporting breastfeeding, and helping connect patients with specialists. Although research is limited on the use of navigators in obstetrics, especially for pregnant adolescents, patient navigators do have a positive impact on the obstetrical population. More research is needed to help determine if navigators can help improve outcomes among pregnant adolescents.

### **Purpose**

The purpose of the project demonstrated the role of an obstetrical navigator in the care team of pregnant adolescents in improving neonatal outcomes.

### **Research Question**

Does the inclusion of an obstetric navigator versus no obstetric navigator in the care team of pregnant women 19 years and younger decrease preterm deliveries and low birthweight neonates born to this population?

### **Methods**

The project is a retrospective chart review of obstetrical patients at a hospital network in eastern Pennsylvania from July 2016 to April 2019. Data was collected from the network's electronic medical record. The data from July 2016 to May 2017 was from one obstetrical facility in the hospital network. Data from June 2017 to April 2019 included two obstetrical facilities in the same hospital network. The project included all pregnant women who delivered in the hospital network, at either facility. Data was collected for all pregnant women who delivered in the hospital network and sorted based on three sets of pre-identified criteria. The criteria included pregnant women 19 years old and younger, pregnant women 19 years old and younger who delivered a neonate less than 37 weeks (258 days) gestation, and pregnant women 19 years old and younger who delivered a neonate greater than 37 weeks gestation with a birthweight less than 2500 grams. For the purposes of this project, less than 37 weeks gestation was considered a preterm neonate and greater than 37 weeks gestation with a birthweight less than 2500 grams was considered a term, low birthweight neonate. The data was sorted for three time frames: July 2016 through June 2017; July 2017 through June 2018; and July 2018 through

April 2019. Once the data was collected, it was sorted by the pre-identified criteria previously discussed. The data from the time frames July 2016 through June 2017 and July 2017 through June 2018 is considered pre-intervention data, before the obstetrical navigator was implemented. The data from July 2018 through April 2019 is considered post-intervention data, after the obstetrical navigator was implemented into the care team for pregnant adolescents.

## **Results**

Data was analyzed using Excel QI Macros. During the time frames of July 2016 through June 2017 and July 2017 through June 2018, prior to the implementation of an obstetrical navigator, the percentage of adolescent deliveries in the hospital network was 4.6% (n=433). The percentage of preterm deliveries for adolescents was 10.6%. The percentage of low birthweight neonates born to adolescents was 10.6%. As a comparison, the overall rate of preterm deliveries and low birthweight neonates for all women greater than 19 years old who delivered in the hospital network during these time frames was 12.2% and 9.9%, respectively.

During the time frame of July 2018 through April 2019, after the implementation of an obstetrical navigator in the care team of pregnant adolescents, the percentage of adolescent deliveries in the hospital network was 4.5%. The percentage of preterm deliveries for adolescents was 14.1%. The percentage of low birthweight neonates born to adolescents was 10.4%. As a comparison, the overall rate of preterm deliveries and low birthweight neonates for all women greater than 19 years old who delivered in the hospital network during this time frame was 12.3% and 10.4%, respectively.

## **Conclusion**

The number of adolescent deliveries post implementation of the obstetric navigator was small (n=192). As a result, we are unable to establish a relationship between the implementation of an obstetric navigator and outcomes. There were several limitations in the project. First, the project was conducted at one hospital network in eastern Pennsylvania and may not be representative of the general population. The study looked at raw percentages of deliveries, preterm deliveries, and low birthweight deliveries within the hospital network. The data was not analyzed in terms of differences among the groups, such as income, race, ethnicity, educational level, or prenatal care attendance, for example. These variables, among others, could potentially impact the rates of preterm deliveries and low birthweight deliveries. Lastly, while the obstetric navigator was specific to the care team of pregnant adolescents, the data does not differentiate which pregnant adolescents had contact with an obstetric navigator as part of their care team.