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CONTRIBUTIONS TO RESILIENCE: EXTERNAL PROTECTIVE FACTORS AND THE ADOLESCENT BIRTH EXPERIENCE

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Oh come to the Father through Jesus the Son, and give Him the glory great things He has done! (Hymn 39)

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ABSTRACT

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Adolescent birth is a worldwide health concern. Despite efforts to decrease the rate of adolescent births, the United States has the highest among developed nations. The focus of past research has been the risks for adolescent birth and the negative impact birth has on adolescents. However, a positive birth experience can have a positive influence on outcomes for both mother and baby in adult populations. This cross-sectional study used the resiliency framework to describe the influence of support, positive infant outcomes, childbirth class attendance, and prenatal care as external protective factors on a positive rating of the birth experience among a convenience sample of adolescent mothers ages 13-19. Data was collected using a one-item, ten point rating scale on birth appraisal and individual questions on a demographic sheet. Descriptive statistics described the sample.

Spearman Rank Order Correlation Coefficient determined significant correlations and logistic regression examined the influence of variables on the study outcome, birth experience. Several correlations were found to associate with birth experience: one external protective factor, father of baby presence, and two demographic factors: parity and ethnicity. Logistic regression showed no factors or demographics to be predictive of a positive birth experience. Findings suggest the need to assess and foster social support, especially of the partner, among childbearing adolescents.

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CHAPTER 1

INTRODUCTION

1.1 Adolescent Pregnancy in the United States

According to the World Health Organization, approximately 11% of all births are to adolescents ages 15-19 years old (World Health Organization, 2014). Among developed countries, the United States reports the highest adolescent birth rate (McGuinness, Medrano, & Hodges, 2013) at 24.2 per 1,000 births to girls of this age group (Centers for Disease Control and Prevention, CDC, 2014). Although the CDC (2017) reported a 9% drop in the adolescent birth rate since 2013, pregnancy in adolescents overall continues to be a national health concern. Pregnancy in adolescence can lead to an increased school dropout rate; poor school performance; increased stress related to the responsibilities of raising a child; and a decreased quality of life overall when compared to adolescents without children (Campos, Barbieri, Torloni, & Guzzelli, 2012; Kawakita, Wilson, Grantz, Landy, Huang, & Gomez-Lobo, 2016). Adolescents in general are more vulnerable to experience a pregnancy because of the many physical and psychological changes that occur during this important stage in life (Cypher, 2013). Consequently, pregnancy during adolescence is a widely researched field of study. However, little is known about the adolescent birth experience and if adolescent mothers perceive their birth experience as a traumatic event.

1.2 The Adolescent Birth Experience

The subjective birth experience has been suggested to be the most important factor in the development of posttraumatic stress following birth (Garthus-Niegel, von Soest, Vollrath, & Eberhard-Gran, 2012) and has been found to be associated with the development of symptoms of PTSD as well (Beck, 2004). Promoting a positive birth experience for an adolescent poses a significant challenge and may directly affect maternal and infant long-term physical and psychological development (Cypher, 2013). Traumatic birth experiences can lead to posttraumatic stress, depression and/or posttraumatic stress disorder (PTSD) (Ayers, 1999). Infants born to adolescent mothers have a higher incidence of low birth weight, preterm delivery, and an increased risk of infant mortality (Cypher, 2013; Kawakita, Wilson, Grantz, Landy, Huang, & Gomez-Lobo, 2016; Torvie, Callegari, Schiff, & Debiec, 2015), further influencing the birth experience (Soet, Brack, & Dilorio, 2003). Furthermore, infants born of traumatized mothers can experience developmental delays and maternal-infant attachment difficulties (Anderson & Cacola, 2017). Due to the continued high birth rate among adolescents in the United States, the focus of research has mostly been on risk factors that contribute to adolescent pregnancy and these subsequent negative health outcomes (Shah, Clements, & Poehlmann, 2011). The importance of understanding what can contribute to a positive outcome for adolescent mothers and their infants, beginning with pregnancy and the birth experience lacks research.

1.2.1 Risk Factors for a Negative Birth Experience

Adolescents are vulnerable to many stressors throughout their pregnancy and birth experience. Adolescents, who typically experience an unplanned pregnancy, are usually less knowledgeable about childbirth (Olivari, Ionio, Bonanomi, & Confalonicri, 2014;

Flynn, Budd, & Modelski, 2008; Lee, Lazebnik, Kuper-Sasse,& Lazebnik, 2016). Their response to the birth experience is often negative, which may stem from a lack of preparation as well as their experience of pain during childbirth (Sauls, 2010). Additionally, a lack of support from healthcare professionals, mother, or partner/father of the infant and/or an adverse infant outcome may render the adolescent vulnerable to negative outcomes throughout their pregnancy and following the birth experience (Sauls, 2002; Torvie, Callegari, Schiff, & Debiec, 2015; Wilson, Damle, Huang, Landy, & Gomez-Lobo, 2012). These stressors, which contribute to a negative birth perception can lead to the possible development of long-term negative outcomes such as PTSD (Ayers, 1999; Soet et al., 2003).

Informational support offered by a healthcare professional or family member can guide the adolescent with knowledge related to the birthing process. Additional emotional support by the healthcare professional and family can help create a sense of safety for the laboring adolescent. For some adolescents, support from the father of the infant can be minimal; but it has been noted among adults to be critical to the birth experience (Beck, 2011) and warrants healthcare professionals to encourage his involvement, as well as support by attending family members.

An increase in support is essential if the outcome of birth is adverse. Experiencing an adverse infant outcome has been shown in adult studies to influence the birth experience. Women giving birth prematurely, or to other infants requiring admission into a neonatal intensive care unit, have been found to be at increased risk for suffering a negative birth experience and/or birth trauma, leading to acute stress disorder (ASD) and development of

post-partum depression and/or PTSD (Beck, 2004; Jubinville, Newburn-Cook, Hegadoren, & Lacaze-Masmonteil, 2012; Sauls, 2010).

1.2.2 What Contributes to a Positive Birth Experience?

Vulnerable adolescents and their fragile infants require a specialized focus of care in order to promote positive outcomes for mother and baby. However, in order for this to occur there is a need for a shift in research focus from risk factors for birth and the negative outcomes of birth that dominate published studies, to research that explores what contributions can lead to a positive birth experience. Because research is also predominately focused on adults' experiences of birth it is of critical importance to understand first how adolescents perceive their birth and what protective factors may have contributed to a positive birth experience.

With only available research related to risk factors among adults to guide the current study, suggestions for potential protective factors to be explored stem from this knowledge. The variable of support; however, has been researched as both a risk and protective factor, but especially as a protective factor (Cypher, 2013). Individual emotional and informational support may be gained through prenatal or childbirth classes or programs offering group support of peers such as Centering Pregnancy classes. Centering Pregnancy prenatal groups have shown positive outcomes for adolescent groups by offering them time for sharing and socialization with other adolescents. Beneficial outcomes among adolescent groups have been seen and include a decrease in preterm and low birth weight births, higher breastfeeding rates, continued educational pursuits, and lower repeat pregnancies rates (Ford et al. 2002; Grady and Bloom 2004; Hoyer et al. 1994). Fergus and Zimmerman (2005) have shown the importance of support as a protective factor by

revealing an association between support and the ability to build self-esteem. The increased self-esteem thus promotes a positive self-identity (Sauls, 2010), which contributes to inner resilience (Warner, 1995).

1.2.3 The Resilience Framework

The resilience theory allows researchers, medical personnel, teachers, and parents to identify the positive factors, which contribute to the inner strength of vulnerable children and adolescents. The resilience framework provides a context for the development of interventions, which can contribute to resilience and positive outcomes in the face of adverse circumstances. This strength-based approach also helps identify inner and external resources that adolescents can draw from that contribute to their positive outcomes, despite their exposure to risks (Zimmerman, 2013).

The current research study is aimed to discover if prenatal care visits, attendance of childbirth classes, and support by family, partner, and healthcare professional lead to a positive birth experience for the adolescent. Infant complications was considered a confounding variable and a healthy birth was explored as an additional external protective factor.

CHAPTER 2

LITERATURE REVIEW

2.1 External Protective Factors

In adult women, prenatal care, childbirth class attendance, support during labor, and positive infant outcomes have been shown to greatly influence the mother's birth perception as well as influence the outcomes for mother and infant. However, how these factors influence the birth experience of adolescent mothers have limited research attention.

2.1.1 Prenatal Care and Childbirth Class Attendance

Lack of prenatal care has been linked to adverse outcomes for infants such as low birth weight, premature birth, and increased risk of infant mortality (Flynn, et al., 2008). In the United States, the recommended number of prenatal visits is approximately 10; however, that number can increase according to the age of the mother and whether or not the pregnancy is deemed to be high risk (Office of Women's Health, U.S. Department of Health & Human Services, 2012). According to Child Trends Databank (2015), 25% of U. S. adolescents under the age of 15 received late or no prenatal care, and only 10% of adolescents ages 15 to 19 received prenatal care in 2014. This is especially concerning when compared to the amount of prenatal care that adult mothers receive. According to the same database, 95.5% of mothers in their thirties receive prenatal care (Child Trends Databank, 2015). Routine prenatal care may aid in reducing infant complications at birth.

Even though babies born to adolescent mothers are at a higher risk for adverse outcomes, a disproportionately small number of adolescents attend childbirth classes. Sauls (2010) found many adolescents do not attend childbirth classes, and come to the hospital with very little knowledge of the birth process. Group prenatal care and birthing classes may be more effective in the adolescent population, increasing compliance with care and improving infant and maternal outcomes such as a decrease in preterm birth rate and low birth weight (Cypher, 2013). Group classes have the advantage of providing support by the group for participants as well (Cypher, 2013).

2.1.2 Labor Support

Adolescence is a time of development and growth, both physically and psychologically. If this developmental period is complicated by the emotional and physiological toll of pregnancy and childbirth, this already vulnerable time can be overwhelming to a developing adolescent (Cypher, 2013; Sauls, 2010a, 2011b). Support during labor can be especially helpful in easing the transition into motherhood and can contribute to the adolescent's perception of her birth experience as positive (Sauls, 2011). Support has been shown to have positive long-term effects, such as building self-esteem and self-confidence, while decreasing the incidence of anxiety and postpartum depression in adult mothers (Wolman et al., 1993).

In an early research study conducted by Lavender, Walkinshaw, and Walton (1999) support was reported as one of the most important components of labor in adult women. For adult women in labor, their most significant source of support is usually their mother (Aune, Torvik, Selboe, Persen, & Dahlberg, 2015). Thompson (2010) found that pregnant adolescents are more likely to have a positive experience during pregnancy if they have a good relationship

with their mother. Adolescents; however, appreciate the support of their partner, mother, and nurse (Sauls, 2010). According to Sauls (2010), nurses who understand how adolescents want to be supported can help build their self-esteem through the childbirth experience. Furthermore; by building a positive self-esteem through support, nurses can also contribute to an adolescent's positive self-identity and thus ease her transition to motherhood (Sauls, 2010). Nurses also need to be aware that adolescents are more likely to have little or no knowledge of the birthing process and will need to be more involved in the labor process to guide their adolescent patients (Sauls, 2010).

2.1.3 Infant Outcomes

Adolescents, especially younger age teens, may experience poor neonatal outcomes such as preterm birth or low birth weight infants requiring NICU admissions as well as increased risk for infant mortality (Holness, 2014; Kawakita et al., 2016; Torvie, Callegari, Schiff, & Debiec, 2015; Wilson, Damle, Huang, Landy, & Gomez-Lobo, 2012).

These negative infant outcomes have been shown to contribute to a negative childbirth experience and maternal mental health issues in adult mothers and can negatively impact maternal-infant attachment and breast feeding (Beck, 2004; Jubinville, et al., 2012; Shah, Clements, & Poehlmann, 2016). In contrast, a perception of a positive birth experience can positively impact maternal and infant outcomes by facilitating a smoother transition into the maternal role and increased maternal-infant bonding (Sauls, 2002a, 2010b, and 2011c).

2.2 Theoretical Framework

The resilience theoretical framework has been used for different situations involving both adults and adolescents but has never been applied as a framework for the understanding of the adolescent birth experience. The theory's significance lies in the ability to promote

positive outcomes for vulnerable individuals by providing a guideline for immediate intervention (Masten, 2011, p.494). The protective factor model of resilience considers external and internal resources to mediate positive outcomes or reduce the risk of negative outcomes in the population of interest. Protective factors are identified by the researcher and are studied to determine how they influence outcomes (Fergus and Zimmerman, 2005). Although an individual's intrinsic strengths certainly influence how well he or she responds to an adverse or challenging life-event, identifying external protective factors helps researchers to understand what distinguishes either positive or negative outcomes for vulnerable individuals; thereby increasing understanding of the adverse event or process (Luthar, Cicchetti, and Becker, 2000).

Using the resiliency framework, the research question for this study was the following: What influence do the defined external protective factors of utilization of prenatal care, childbirth class attendance, support (by mother, healthcare professional, and/or partner), and positive birth outcome have upon the birth experience of adolescents?

CHAPTER 3

METHODOLOGY

3.1 Design

Using the resiliency theoretical framework, this IRB approved cross-sectional study described the influence of external protective factors on a positive rating of the birth experience. This study is part of a larger longitudinal study assessing symptoms related to birth trauma over nine months among an ethnically diverse adolescent sample.

3.1.1 Sample and Settings

The study sample consisted of 303 conveniently selected adolescents. Inclusion criteria for the study included ability to read and speak English or Spanish, postpartum status within 72 hours, and age between 13 and 19. The research setting was a large county hospital with a yearly admission rate of over 20,000 patients and over 6,000 births annually. Over 10% of births are to adolescents. Approximately 75% of the childbearing adolescents in the setting are ages 17 to 19 and Hispanic.

3.1.2 Measures

The birth experience was determined via a one-item, ten point rating scale anchored between 1 ("*great"/non-traumatic*) to 10 ("*awful"/traumatic)*. While additional items may have provided a wider scope of information, Youngblut and Casper (1993) reported that single item indicators have shown adequate "reliability and construct validity" plus provided "valuable information regarding individual perceptions of a concept under study, such as symptoms intensity" (p. 463). A one-item rating scale has been used by others to

describe the adult's birth experience (Sorenson & Tschetter, 2010). A "traumatic" birth was defined as a rating over 6, which is in congruence with the work of Sorenson and Tschetter (2010).

Childbirth items identified in the literature as associated with the childbirth experience have been primarily described as risk factors leading to a negative birth experience; however, the lack of risk, for example, with the presence of supports or a positive infant outcome may serve as protective factors. Additionally, increased knowledge of the labor and birth process through childbirth class attendance and regularly scheduled prenatal care visits may also serve as protective factors for the adolescent. Data related to support by mother, healthcare professional, and father of the baby in labor; infant outcome (measured as number of infant complications and prematurity); childbirth class attendance; and number of prenatal care visits were collected via individual questions on a researcher-developed demographic sheet, which also obtained information on parity, education, and age of the adolescent.

3.1.3 Procedures

Upon request, hospital staff aided researchers in identifying potential subjects by inclusion-exclusion criteria. Researchers explained the study thoroughly for potential subjects in the preferred language prior to consent. Consents for minors under the age of 18 included adolescent assent/consent and parental/guardian consent. Older adolescents self-assented and consented. Following explanation and consent in either Spanish or English, survey information was obtained by either the principle investigator (PI) or one of several graduate research assistants over approximately a 45 minute period. Community

and hospital resources and referrals were provided as needed or at request regarding maternal mental health and infant care and development.

3.2 Data Analysis

Data were analyzed using the Statistical Package for Social Science (SPSS, version, 21: Somers, NY). Descriptive statistics used means, standard deviations, medians, frequencies, and percentages to describe the adolescents and identify childbirth class attendance, number of prenatal care visits, infant outcome, and sources of support. Frequencies and yes-no answers (dummied coded as 0-1) provided interval level data. However, the rating scale was considered an ordinal level of measurement; therefore, correlations between external protective factors and birth experience ratings were performed using the Spearman Rank Order Correlation Coefficient. Nominal level measurements were analyzed with Chi Squares. The influence of the independent variables (dichotomized) upon birth perception was determined via logistic regression. The trauma of the birth experience was dichotomized as low trauma = 0 (score of 0-6) and high trauma = 1 (score of 7-10). The level of significance was set at 0.05.

CHAPTER 4

RESULTS

The following results give sampling characteristics via descriptive statistics, the correlations between the variables, and the logistic regression analysis. The sample consisted of a convenience sample of 303 adolescents ranging in age from 13-19 years old with a mean of 17.8 years (SD=1.38). The majority were older Hispanic adolescents giving birth to their first infant. See Table 4.1 for sampling characteristics.

Table 4.1: Sample Characteristics

Variable		n (%)
Age		
13-16 years old	47	(15.5)
17-19 years old	249	(84.5)
Primagravida	227	(77.5)
Multiparous	66	(22.5)
Ethnic Origin		
African American	75	(24.8)
Caucasian	31	(10.2)
Hispanic	183	(60.4)
Other	4	(1.33)

4.1 Prenatal Care Visits and Childbirth Class Attendance

Unexpectedly, a majority of adolescents in our sample reported that they had attended at least one prenatal care visit, with 67.1% reporting less than 11 visits and 32.9% reporting that they had 11 or more visits. The mean was 9.5 (SD= 4.76).

The number of adolescent mothers who participated in childbirth classes was not as high as was expected. Only 61 reported participating in at least one class (25.8%), and 175 reported that they did not participate in childbirth classes (74.2%).

4.2 Labor Support

Nearly all adolescents in our sample (n=283/93.4%) reported that they had at least one support person with them during labor (either their mother or the father of the baby). However, 26 (8.6%) of the adolescents reported no one with them during labor. It is interesting to note that the 26 adolescents who did not have anyone with them during labor were older Hispanic adolescents. Of the 257 adolescents who reported having at least one support person with them during labor, 164 (54.1%) reported the source of support to be the mother, while 93 (30.7%) had another person with them. The majority of adolescents (n=191/63.0%) reported that the father of their baby was present with them during labor.

4.3 Infant Outcomes and Gestational Age at Delivery

A question related to infant complications was added to the survey later with only 91 (30.0%) of the adolescents responding. The majority of the adolescents, 89 (74.2%), reported no infant complications (e.g. breech birth or cord around the neck). However, 31 (25.8%) did report complications at birth.

Of the adolescents who responded to the questions regarding the gestational age of their infant, 32 (11.4%) mothers had infants born at less than 37 weeks gestation. The

majority of adolescent mothers in the sample gave birth to infants at 38 weeks or more gestation, with 248 (88.6%) reporting on preterm birth.

4.4 Rating of the Childbirth Experience

The mean birth trauma score was 5.16, with a median of 5.00, and the standard deviation was 2.92, with a range of 9. Many adolescents 188 (64.6%) reported a low perception of trauma during their birth experience. However, 103 (35.4%) reported that they perceived their birth experience as traumatic. See Table 4.2 for childbirth experience appraisal by age group.

Table 4.2: Rating of the Childbirth Experience

Variable	n (%)
Childbirth Experience Appraisal by Age	
13-16 years old	15 (32.6)
17-19 years old	88 (36.0)

4.5 Correlations

Age was not significantly (NS) correlated with birth experience. The results indicated that an adolescent could report perception of trauma during their birth experience. Parity was found to be significant to birth experience with a Spearman's rho value of .15, p=.01. Ethnicity was found to be significant to birth experience as well, with a Chi Square value of 22.44, p=.029. Finally, the father of the baby being present during labor and delivery was also found to be significant to the adolescent birth experience, with a Chi Square value of 4.11, p= .029. Logistic regression analysis found no variables to be significant to a positive birth experience at the alpha of .05.

CHAPTER 5

DISCUSSION

Findings reflect the majority of the sample as older Hispanic adolescents. This sample bias is not unexpected based on the demographics of the sample setting; therefore, findings are accepted with caution.

5.1 Prenatal Care and Childbirth Class Attendance

Participation in prenatal care and was higher than expected, as the majority of the adolescents reported that they had at least one prenatal care visit. This is partially explained by the fact that this setting offers Centering Pregnancy prenatal class and childbirth classes with encouragement for all teens to attend.

Childbirth class attendance was less of a priority for the teens. To some, 9 visits has been deemed acceptable usage for the normal low risk expectant mother, and using this standard many adolescents in our sample had an acceptable number of prenatal care visits. However, the question must be raised whether or not the adolescents are at a low-risk for complications and negative outcomes during pregnancy, as there are higher rates of depression, abuse, and preterm birth among this vulnerable population. One adolescent reported that she watched videos on YouTube to learn more about birth, while another stated that she, "…planned to do it, but didn't get around to it," (her baby was born at 38 weeks). Again, there were a large number who did not respond to the question as well, which could have altered our results. However, these findings are consistent with current

trends in literature, which show that adolescents are less likely to receive prenatal care and attend childbirth classes (Torvie, et.al., 2015; Sauls, 2004).

5.2 Labor Support and the Rating of the Childbirth Experience

Support was not found to be significantly associated with birth trauma, with the majority of the laboring adolescents having at least one support person with them during labor. Older adolescents were less likely to have their mother with them; however, all of the younger adolescents (13-16) reported that their mother was with them during labor and delivery.

Despite support for most by family, father of baby or a healthcare professional, 32.6% of young adolescents reported that their birth experience was traumatic, as did 36.0% of older adolescents. This could reflect their lack of preparation and readiness for birth due to lack of education through prenatal care visits and childbirth classes, regardless of age or the source of support that may have made a difference. This could also indicate a need for further involvement and support from the nurse and other healthcare professionals, as adolescents may benefit from more support due to their vulnerable state, especially the older teens as caregivers may assume they know more about labor and birth than younger teens.

Sadly, 26 of the older adolescents reported that they did not have anyone with them during labor. This taken together with the fact that many older adolescents found their births to be traumatic could mean that they did find their nurse to be supportive of them during labor. Cultural influences and beliefs may have played a role in their perception of labor and delivery and need of support during labor, as there is a higher incidence of adolescent pregnancy among Hispanic teens (Alio, Mbah, Grunsten, & Salihu, 2011).

Therefore, the following questions must be raised: Is adolescent pregnancy more accepted (or even expected) among older Hispanic adolescents? Are there more stable relationships among this population and therefore higher birth rates? And finally, are older Hispanic adolescents expected to have the maturity to face their labor and delivery alone? Further research is needed among this population to explore these questions and confirm these findings.

Furthermore, the presence or absence of the father of the infant at delivery contributed to the birth experience. This could be because the majority of the adolescents in the sample were older (17-19 years old) and were therefore more likely to be in a more stable relationship than their younger peers. This finding was an expected finding. If the partner was not involved it might have caused considerable stress to the laboring adolescent, as the father of the baby is valued among childbearing adolescents. Sauls (2010) also found that adolescents reported that they wanted the father of their baby to be involved in labor.

Unexpectedly, older adolescents reported a more traumatic birth experience than their younger counterparts. This could be due to more support by family, friends, and health care professionals to the younger adolescents because they may be seen as more vulnerable due to the increased likelihood that they will experience adverse outcomes (Office of Women's Health, U.S. Department of Health & Human Services, 2012; Tirvue, et. al., 2015). Furthermore, 100% of the younger adolescents had their mothers with them during labor and delivery, while only 13.7% of adolescents in the older age group had their mother with them. This finding suggests that maternal support and involvement may be the most important source of support for adolescent mothers.

5.3 Parity and Infant Outcomes

The significance of parity was expected among the sample, as the majority of the adolescents were primagravidas. First births are expected to be more traumatic as the fear of the unknown can greatly influence birth perception. However, although this finding was statistically significant, it was not found to be clinically significant. Again, this could reflect sample bias as the majority of the adolescent mothers were giving birth to their first child.

Infant outcomes were found to be a significant predictor for a traumatic birth rating in both age groups. Pre-term birth and NICU admission have been shown to significantly increase maternal stress in adults, which contributes to a negative perception of the birth experience (Beck, 2004; Shah, Clement, & Poehlmann, 2010).

CHAPTER 6

CONCLUSION

If adult women report negative birth experiences and birth trauma resulting in mental health consequences, the consequences for vulnerable young adolescents whose development has been interrupted by an unplanned pregnancy may be severe. It is unlikely that adolescent pregnancy in the U.S. will decrease dramatically in the near future; therefore, there is the need for further research using larger and more diverse populations to define and further develop possible external protective factors that contribute to a positive birth experience for adolescent mothers. The resilience framework is a useful guide that assists in providing a context for external and internal resources that can contribute to positive holistic outcomes for adolescent mothers and their infants.

6.1 Implications for Nursing Practice

Nurses who work with pregnant adolescents in both the hospital and community setting need to be aware of the heightened physical and developmental vulnerability of their patients. They also need to be aware of the educational deficits that these young women may have related to the importance of prenatal care and the labor and delivery process. If healthcare providers can intervene early on during an adolescent's pregnancy to ensure that she has access to adequate prenatal care and childbirth classes, her increased knowledge and possibility for improved health outcomes may contribute to her birth experience. School nurses and other healthcare professionals need to encourage prenatal

care visits and childbirth class attendance as soon as possible once it is known that the adolescent is expecting. The expectant mother should be informed of the importance of prenatal care and childbirth classes as well as the positive outcomes associated with their utilization of these resources. It is especially important that labor and delivery nurses be ready to offer increased support to laboring adolescent mothers and encourage the participation of the adolescent's mother and the father of the baby if they are present during delivery. Increased support may have a significant impact on the adolescent's perception of the birth experience and therefore impacts both the mother and baby long after delivery.

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BIOGRAPHICAL INFORMATION

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