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Use of a resiliency framework to examine pregnancy and birth outcomes among adolescents: A qualitative study

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Abstract

Introduction—Adolescent childbearing has been viewed as a social, political, and public health priority since the 1970s. Research has primarily focused on the negative consequences of teen pregnancy; less research has explored factors associated with healthy pregnancy and birth experiences in this population.

Methods—Using open-ended and qualitative techniques, researchers performed individual interviews with fifteen adolescent mothers (15–19 years of age) recruited from a Women's and Children's Clinic in Southern Louisiana, who had experienced a healthy pregnancy and bore a full-term, normal birth weight infant. We used a resiliency framework to identify factors that may have supported positive health outcomes despite risks associated with low-income and/or marginalized minority status.

Results—A total of 15 mothers of multiple racial/ethnic identities were included in the analysis. Mothers discussed potential protective factors that we classified as either assets (internal factors) or resources (external factors). Mothers demonstrated strong assets including self-efficacy and self-acceptance and important resources including familial support and partner support during pregnancy which may have contributed to their resiliency.

Discussion—Ensuring access to social and structural supports as well as supporting adolescent-friendly health and social policies may be key to promoting healthy maternal and infant outcomes among young women who become pregnant.

Keywords

resiliency; adolescent pregnancy; qualitative research

Although adolescent pregnancy has decreased in recent years (Hamilton et al., 2011), the adolescent birth rate in the United States remains among the highest of any industrialized nation (Kearney & Levine, 2012). In the 1970s, adolescent childbearing emerged as a significant social, political, and public health priority (Shields, 2006) from within a cultural context largely condemning teenage pregnancy as an amoral act, politically and psychosocially stigmatizing young women who become pregnant, and young African American mothers in particular (Geronimus, 2004). Research has primarily focused on

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describing the adverse health consequences of teenage pregnancy (Chen et al., 2007; Ekwo & Moawad, 2000; Gilbert, Jandial, Field, Bigelow, & Danielsen, 2004). However, age and biological immaturity alone may not account for the increased health risks experienced by pregnant adolescents. Additional factors identified include the psychosocial context in which most adolescent pregnancies occur (Alio, Mbah, Grunsten, & Salihu, 2011), environmental risk factors (Cunnington, 2001; Geronimus, 2004), poverty and neighborhood context (Arai, 2007) or the interaction of multiple factors (Markovitz, Cook, Flick, & Leet, 2005). While prevention has been the primary strategy in addressing teen pregnancy, a small number of both qualitative and quantitative studies have explored factors that may contribute to positive pregnancy outcomes among adolescents (Dogan-Ates, 2007; East, 2006; Hess, Papas, & Black, 2002; McDermott & Graham, 2005). Research that utilizes a human rights lens to focus on promotion of healthy adolescent childbearing is particularly important for individuals from low-resource settings. Members of these communities have limited educational and employment opportunities due to social and structural disadvantage (Geronimus 2004).

Qualitative studies facilitate understanding and give voice to the lived experiences of marginalized and/or stigmatized communities including pregnant/parenting adolescents. Previous qualitative studies among pregnant/parenting adolescents include explorations of intentionality and contraception (Kendall et al., 2005), sources of support (De Jonge, 2001; Stevenson et al., 1999) and perceived advantages and disadvantages of adolescent pregnancy (Lesser et al., 1998; Rosengard et al., 2006; Spear, 2004), among other topics. A meta-analysis of qualitative data by Spear and Lock (2003) identified four main themes consistent throughout the 22 included studies: 1) factors influencing pregnancy; 2) pregnancy resolution 3) meaning of pregnancy/life transition and 4) parenting/motherhood. These studies, and the need for a new and positive approach to understanding adolescent pregnancy have set the foundation for further exploration utilizing the resiliency framework.

Resilience, a concept developed in the field of psychology, focuses on resistance to risks in the physical and social environment, overcoming stress and adversity to maintain relatively good psychological and physical health (Werner & Smith, 1982; Garmezy, 1983; Rutter, 1987; Rutter, 2006). Resilience encompasses several levels; protective factors that prevent, counter, or buffer the effects of adversity can appear not only as individual-level traits, but rather occur on every level of the social ecology paradigm (Bronfenbrenner, 1979), including supportive family microsystems, peer networks, communities and institutions (Sandler, 2001; Ungar, 2011). Assets represent “the positive factors that reside within the individual, such as competence, coping skills, and self-efficacy” (Fergus & Zimmerman, 2005, p. 399) while resources, refer to factors in the social environment external to the individual (Fergus & Zimmerman, 2005).

We explored experiences of resilience in a group of adolescent women who experienced healthy pregnancy and childbirth. Identifying the assets and resources among adolescents who delivered healthy infants can provide guidance for implementation of interventions that target specific assets and resources. Moreover, it may allow a local community to leverage existing resources for greater improvement in population health.

Methods

Data Collection

We recruited participants using purposive sampling methods. Social workers and nurses at a local Women Infants and Children clinic (WIC) identified mothers aged 19 years or younger who reported an uncomplicated pregnancy and uncomplicated vaginal birth of a healthy infant. We defined Non-complicated pregnancy as pregnancy without comorbidities of gestational diabetes, gestational hypertension, preeclampsia, or other major morbidity. A healthy infant was defined as one with normal birth weight (2500–4000g), full term (37–42 weeks gestation), and was not admitted to the neonatal intensive care unit (NICU) after delivery. All enrolled women met the income-based WIC eligibility criteria earning at or below 185% of the U.S. Poverty Income Guidelines (Food & Nutrition Service, 2013).

Trained research assistants approached eligible women to participate in the study. All 16 women invited to participate agreed to be interviewed. All mothers reported residency in Orleans or Jefferson Parishes in Louisiana. We excluded one participants' data from the analysis after learning of pregnancy complications during her interview. We used an interview template consisting of open-ended questions with each participant. Two trained research assistants conducted interviews using a script with open-ended questions; interviews lasted 30–60 minutes.

Data Analysis

A research assistant recorded and transcribed interviews and uploaded to the qualitative analysis software Qualitative Data Analysis Miner Lite, QDA Miner Lite by Provalis Research. Two investigators, KCK and AES, reviewed the interviews applying a resiliency framework to identify major and minor themes considered either assets or resources. After composing a list of major and minor themes, researchers identified specific quotes or passages that supported each theme. AES coded and reviewed all interviews. During coding, AES reviewed and updated the codebook to identify additional themes, re-categorize themes, and adjust the definition of themes. Updated codes were re-applied to previously coded interviews. We reached thematic saturation when the codebook was no longer modified, before all interviews were coded; however, final coding was completed on all subjects. The Institutional Review Board at Tulane University approved this study.

Results

Participant Description

The 15 participants ranged in age from 15 to 19. Six mothers identified as African-American or black, 2 as Latina, 3 as Caucasian or white, 3 did not identify and 1 identified as mixed. Three had been enrolled in community college when they became pregnant, 5 had a high school diploma, 3 were still enrolled in high school, 4 planned to complete their GED. One mother had an older child, the rest were primiparous.

Most participants (n=13, 87%) reported being in a relationship when they became pregnant and remained partnered after the pregnancy (n=11, 73%). All participants entered prenatal

care, 14 of the 15 in the first trimester, and 15 by the second. All mothers reported taking prenatal vitamins at initiation of prenatal care.

Assets

A number of common positive attributes with potentially protective health effects emerged throughout the interviews. Specific attitudes or actions in this category included the mother having a positive outlook, having self-efficacy, being motivated to set/achieve educational and career goals, and resisting cultural stereotypes and stigma around teenage motherhood. Additionally, mothers reported a stabilizing effect of their pregnancy that caused them to focus on the life of the child over themselves.

Attributes of mother—Researchers coded mothers as having a positive outlook if they specifically mentioned that they tried to remain positive or if the mother focused primarily on positive topics and did not focus on negative experiences they may have encountered. All mothers mentioned having some negative experiences; however, the majority of mothers remained positive recounting their pregnancy and the struggles they faced between family members, school, and symptoms of pregnancy.

Mothers were coded as having self-efficacy if they discussed taking steps to achieve a goal, such as completing school or getting a job, *"I am not [in school], but I just went this morning to go apply to school, so I am starting in January."* All mothers reported receiving regular prenatal care, all but 1 beginning in the first trimester. Among these participants, seeking and attending prenatal care was considered a sign of self-efficacy particularly due to challenges with availability of adolescent-friendly prenatal services.

Education emerged as a priority in a majority mothers interviewed. Although some had not completed their high school education, many were enrolled in classes or spoke about pursuing their GED. One mother completed her senior year of high school online. Many of mothers completed high school before they gave birth and did not feel like they had problems with the school nor with the school accommodating them due to their symptoms of pregnancy. However, a few of the mothers perceived barriers to completing their high school education. Some of the barriers the mothers experienced included feelings of judgment from other students and staff, and having problems attending school due to the symptoms of pregnancy. One mother was reluctant to tell anyone in the school for fear of being sent to a "pregnancy school."

Mothers shared a common motivation to establish careers and support their baby. Many of the mothers expressed hope that they might provide their children material goods and experiences that they had lacked during childhood, including going to museums and playing sports. Mothers often focused on completing their education so that they could have a career and support themselves and their child in the future, *"I feel like I need something to take care of my child besides- I work at Walmart now- besides Walmart. It's not a dependable job, I need a career, something I can bring home, and she's not gonna ask for nothing."*

Another major asset that emerged was the stabilizing effect of pregnancy. Several of the mothers spoke about the chaotic nature of their lives, and how becoming pregnant gave them

more direction and deeper purpose. *"I immediately stopped partying and drinking. I was smoking cigarettes daily, I stopped [smoking weed and stopped drinking]. I didn't wanna party anymore."* In general, mothers turned their focus to the baby instead of themselves, *""I stopped smoking. I used to smoke cigarettes. I stopped smoking, like, immediately when I found out."*

Resilience to adversity—Many mothers spoke about feeling judged by peers, teachers, adults in the community, and themselves and the difficulty in resisting judgment. Common themes of self-acceptance and a rejection of social stigma emerged; mothers wanted to set themselves aside from the teen mother stereotype they feared. *"I don't know. Sometimes I feel like people look because oh I look young and I'm pregnant, but then that's a lot of people that you know, like, but then I was just like why is everyone looking like they've never seen a pregnant person before."* Mothers spoke about actively rejecting the stereotypes that they believed people, both adults and peers, would place on them, *"Knowing that I am doing something constructive with my life. Not being the typical baby momma. Sitting at home watching TV all day. I go to school and I work."*

Resources

Many mothers described strong social support systems. The primary source of support was typically from their own mother (the maternal grandmother of the infant); however, fathers (maternal grandfathers), siblings, and partners also played a large role. One mother received additional support from a home-visiting nurse assigned to her from the Nurse Family Partnership.

Family resources—Overall, mothers described a loving and supportive home and were thankful for the support and acceptance by their family, *"my mom, my dad, and my step-dad, well, practically everybody. Nobody really like shut me out, no one was really like 'oh, you're pregnant, go away'"*. Many mothers mentioned that their parents were initially very upset and even disappointed when they became pregnant, citing their parents' hopes that they have higher education and a career before accepting the responsibility of raising a child. In all cases the parents supported their daughter, this was especially true of the maternal grandmother of the baby. *"It's funny because my mom was, at first, like no no no you cannot have a baby you need to give it up for adoption. But, like, later on in the pregnancy, she got really excited and now, oh my gosh, she cannot get enough!"*

In addition to parental support, mothers also discussed support of the baby's father. Most mothers had a prior relationship with the baby's father before they became pregnant. The majority of mothers relied on the father for monetary and emotional support during the pregnancy and after the child was born. Many reported a high level of paternal involvement with the pregnancy, with some fathers leaving school to find a job to support the mother and child. Other mothers mentioned various types of emotional support including attending prenatal care, buying food that the mother was craving, and helping with the nursery, *"…he knew I would get too tired, and I wouldn't feel good, so he put the bed together… um he put her name up on the wall and all her ultrasound pictures are on a little collage on the wall,*

and now it's even more, because we had professional pictures done of her so…he did the whole nursery.

In addition to emotional support, grandparents were frequently providing monetary support in addition to housing to the mothers. Mothers often spoke of their parents buying essential baby items like cribs and car seats, and diapers in addition to clothing and toys, "*Our family helped us with her crib, her changing table, everything. Her stroller, car seat everything, they helped us with everything so, I was lucky to have them because without them we would have been without everything.*"

In addition to strong support systems, most participants learned their pregnancy status in the first trimester and began attending prenatal care. We considered attending prenatal care both as an asset and as a resource, as required that the women seek and continue to attend care where they gained knowledge and medical support about pregnancy. Most but not all participants reported positive experiences of prenatal care. While some mothers reported very negative interactions with their providers, one mother – who was homeless for a time – spoke about her doctor as her primary source of support, "*He's one of them doctors that he tells you the truth whether you like it or not he going to be real with you…but you know he's doing it because he cares…so he was a lot of help for me getting to my appointments if I couldn't make it he would make one of his nurses come get me he just wants to make sure that my baby is healthy…*" Additionally, two mothers spoke specifically about the benefits of Nurse Family Partnership, and the critical support that their nurse provided to them.

Discussion

We used a resiliency framework to explore factors contributing to a healthy pregnancy and birth experience among women at risk given their low-income status and the psychosocial marginalization associated with their young age and/or minority status. In the group of 15 adolescent mothers who had uncomplicated pregnancies and gave birth to healthy babies, we identified multiple assets and resources that may have contributed to their resilience in spite of their high-risk status.

Assets, those positive factors that the mother possesses, included having a positive attitude, self-efficacy, being motivated to set/achieve educational and career goals, and resisting cultural stereotypes and stigma around teenage motherhood. Additionally, mothers reported a stabilizing effect of their pregnancy that caused them to focus on the life of the child over themselves. Resources, or those positive factors that are from the external environment of the mother, included strong support systems that included both emotional and monetary support as well as a supportive healthcare system. Mothers in the group also had early and consistent prenatal care and had attained or were interested in continuing and pursing education.

Overall mothers spoke positively about the ongoing support that they received during pregnancy.. Mothers reported a high amount of support from parents, siblings, and the father of the baby. Recent research regarding the dynamics of adolescent pregnancy has suggested that lack of familial and paternal support may lead to worse pregnancy and birth outcomes

(Alio et al., 2011; Dole et al., 2003; Ghosh, Wilhelm, Dunkel-Schetter, Lombardi, & Ritz, 2010). A previous study of resiliency among adolescent mothers also identified the importance of familial support among adolescent mothers with positive pregnancy outcomes (East, 2006). Many mothers reported emotional and monetary support from the father of the baby. It is possible that the feeling of support during pregnancy attenuated the high stress of pregnancy, the upcoming care of a newborn, and planning for the future. Due to the help of family members, many mothers had free childcare that allowed them to finish high school, enroll in undergraduate classes, be employed, and go out socially after the birth of the baby.

Another common resource among mothers was the initiation of prenatal care in the first trimester. Many studies have reported that adolescents are less likely to receive prenatal care or to begin care in the first trimester (Hueston, Geesey, & Diaz, 2008). All mothers began prenatal care once they identified that they were pregnant. Accessing prenatal care early in pregnancy is also likely to be indicative of other resources, such as familial support or familiarity with the health system. Attendance of prenatal care may also be a consequence of other unidentified assets that the mother possesses such as a strong self-efficacy and/or a focus on healthy behavior (Hamilton et al., 2011).

Although the literature is conflicted, maternal stress is frequently associated with negative pregnancy outcomes such as preeclampsia, preterm birth, and small for gestational age (Elsenbruch et al., 2007; Federenko & Wadhwa, 2004; Vidal et al., 2014). In this group of adolescent mothers, the available resources may both directly and indirectly interact with stress attenuating the effects of this risk factor. Although the actual mechanisms of poor pregnancy/birth outcomes are likely multifactorial, it is possible that in the absence of other strong negative factors the resources and assets that this group of mothers exhibited are enough to mitigate poor outcomes.

Finally, for some of the mothers, the pregnancy itself appeared to positively influence the risk environment. Mothers changed unhealthy behaviors, sought health care services, prioritized educational attainment and future financial stability. The pregnancy may have contributed to a positive re-organization of their chaotic lives (Kreager et al., 2010; Edin & Kefalas, 2005).

A major limitation in this study was the small number of participants. While participants shared valuable information, the experiences of these young women do not necessarily represent a generalized experience of adolescent pregnancy. Secondly, transportation to and from the WIC clinic was an issue for some of the participants; two interviews were not completed because the interviewees had to leave.

Future research should include a larger qualitative study to further explore the themes identified in this research. Additionally, it is important to interview the fathers of the infants as well to better understand their experiences and perspectives and to explore systems of support that are critical for them to stay involved with their child.

In this study, we utilized an asset or resource-based approach to explore factors critical to the resiliency of adolescent mothers. Because there is considerable stigma against pregnant adolescents at the individual, interpersonal, community and societal levels, public health

researchers and practitioners should utilize frameworks such as a resiliency framework, which seeks to understand what is 'right' instead of what is 'wrong'. Here, we found that support systems, whether in the school, home, community or medical system, are critical to promoting healthy outcomes of pregnancy. Ensuring access to such supports, or attempting to create those systems of support for adolescents who may not have them, as well as supporting adolescent-friendly health and social policies, is key to reducing adverse health outcomes for the mother and her infant. More qualitative research, which attempts to capture the true experiences of adolescent mothers, is critical to identifying participatory solutions to this complex issue.

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