The purpose of this educational activity is to assist professional nurses in their efforts to more fully comprehend the potential psychological consequences, including PTSD and PPD that can occur when adolescents go through childbirth. The nursing approaches that can be effectively used with these patients will help nurses to intervene and assist the adolescent mother in her recovery and future health maintenance.

Psychological Consequences of Childbirth Among Adolescents

Birth trauma experienced by adult women can trigger signs and symptoms of both acute and chronic posttraumatic stress disorder (PTSD) and subsequent postpartum depression (PPD) (Creedy, 2000). Due to developmental levels and potentially a lack of support or resources, adolescents’ childbirth experiences may be extremely traumatizing. Teens report a fear of dying with the hope for survival following the ordeal of birth (Nichols, 1996). Annually thousands of teens deliver infants and often these adolescents are not prepared to assume the role of mother. Once traumatized by labor and delivery, and immobilized by PPD, they find the tasks of motherhood overwhelming. Therefore, not only is the teen mother affected by the events of childbirth and the reality of motherhood, but the children of these teen mothers who suffer mood disorders can have long term disturbances to their emotional, behavioral and cognitive developments (Gamble, et al., 2005).

In the United States, approximately 750,000 to 800,000 adolescents annually experience pregnancy (Centers for Disease Control & Prevention (CDC), 2000); 74% to 95% of these pregnancies are unintended (Spitz, et al., 1996). Birth rates for teens ages 15 to 19 and below 15 consistently declined for many years (Martin, et al., 2003); however, rates within these age groups rose 3% in 2006 (CDC, 2007). Additionally, rates still remain five times higher in the United States than in all other developed countries (Clemmens, 2002).

At the completion of the article and the post test, the reader should be able to:

- Identify the incidence/prevalence of posttraumatic stress disorder (PTSD) and postpartum depression (PPD) among adult and adolescent mothers.
- Identify signs and symptoms of PTSD and PPD.
- List three consequences of PTSD and PPD.
- Discuss the linkage between traumas/abuse PTSD and PPD for effective nursing assessments.
- Compare childbirth experiences between adult and teens.
- Describe three appropriate and effective nursing interventions including resources/referrals.

Dr. Cheryl Anderson has taught in the field of nursing for over 30 years specifically in the area of maternal-child health. Caring for many teen mothers some as young as 10 years of age led to her interest in depression and consequences of childbirth. Originally receiving her RN from Scott & White Memorial Hospital, Dr. Anderson received her bachelor’s degree from San Diego State University, a master’s degree in Maternal Child Health from UCLA and PhD from Texas Women’s University in the area of sociology.

The author reports no relevant financial relationships or conflicts of interest.

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Pregnancy, labor, and delivery can be emotionally stressful to any woman, and the transition from childhood to parenthood, especially for the adolescent mother, is often overwhelming and may result in psychological sequelae. Becoming a parent and continuing the emotional, physical and identity development that occurs during adolescence can be difficult (Stevenson, Maton, & Teti, 1999). Clinicians need to be aware that identity development for the teen is a prominent developmental task and may impact the way events (such as childbirth) are perceived and interpreted (Low, Martin, Sampselle, Guthrie, & Oakley, 2003). At their developmental stage, pregnant teens are likely to have fears about medical personnel, the hospital environment, medical procedures and even “splitting open during birth” (Montgomery, 2003).

Adolescents define the birth experience somewhat differently than adults (Low, et al., 2003). Adults often consider physical and emotional support and the ability to maintain control over one’s experience as a positive birth experience (Low et al., 2003). Adolescents spend limited time planning for the childbirth experience and pain control, emotional support and individualized care are reported as top priorities (Sauls, 2004). If physical pain defines the birth experience, the childbirth experience overall receives a negative rating.

Teens feel a proud accomplishment when they survive childbirth and progress through the event naturally. Adolescents, however, typically chose not to attend prenatal classes with recognized educational needs often directed at baby care rather than to the event of birth. Teens appreciate most those caregivers who respect them for the knowledge they have but also provide information to guide their choices (Low, et al.). Lacking knowledge may lead to unrealistic expectations about the birth process, and coupled with fewer coping resources, labor and delivery can become a very traumatic experience. Literature suggests that a positive perception of childbirth (satisfaction with experience and care) is promoted by greater maternal age, multiparity, prenatal education, shorter labors, home-like birth environments, vaginal delivery, fewer medical interventions, increased maternal confidence/self-esteem, decreased maternal stress/anxiety, met expectations, non-separation between mother and infant at birth, increased maternal perception of control, decreased fear of pain, fewer birth complications and perceived support from partner or nurse (Bryanton, Gagnon, Johnson, & Hatem, 2008).

Birth trauma is an event occurring around the labor and delivery process that involves actual or threatened serious injury or death to the mother or infant (Beck, 2004). The birthing woman can experience intense fear, helplessness, loss of control and horror (Beck). Childbirth has been explored as an event that could be perceived by adult women as traumatic and cause a posttraumatic stress reaction (Soet, Brack, & Dilorio, 2003) and subsequently postpartum depression (PPD) (Creedy, 2000). No studies exist describing PTSD and PPD among adolescents following childbirth. A small (N=28) cross-sectional study by this researcher revealed a 20% and 50% rate of symptomatology for PTSD and PPD respectively at nine months postpartum. Knowledge regarding PTSD and depression at pregnancy or prior to pregnancy, however, was not available.

According to the American Psychiatric Association (APA) (2000), post-traumatic stress disorder (PTSD) is a psychological disorder that follows a traumatic event involving the threat of death or the perceived threat of death or injury that is accompanied by feelings of helplessness or intense fear. Women report a significantly higher life-
time prevalence of PTSD than men (APA, 2000) with one in ten suffering from PTSD in her lifetime (Seng, Low, Sparbel, & Killion, 2004). A link between PTSD and childbirth has been suggested in adult populations.

In one study of 499 adult women, over one-third described their birth experience as traumatic (Creedy, Schochet, & Horsfall, 2000). While birth trauma is in the "eye of the beholder," infant death, emergency cesarean section delivery, fear of an epidural, congenital abnormalities, separation of mother from infant due to an NICU admission, severe toxemia, rapid delivery and a degrading experience are some of the birth traumas reported by new mothers (Beck, 2004). Factors precipitating birth trauma include lacking a sense of control, such as with decision-making responsibilities (Green & Baston, 2003) or related to bodily sensations (Kennedy & MacDonald, 2002); uncontrolled pain; delivery of an ill infant; a feeling of powerlessness; increased medical interventions; feelings of anxiety or panic; feeling alone, without support or uncared for (Soet, Brack, & Dilorio, 2003); and inadequate information (Beck, 2004).

Ryding, Wijma & Wijma (1998) revealed that 55% of adult study mothers (N=396) at two days postpartum reported intense fear of death or injury to themselves or their infants, fulfilling the stressor criterion of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)(APA, 2000). A separate study reported nearly 3% of adult women (N=218) at six weeks postpartum and 1.5% of women at six months postpartum displayed symptoms of PTSD (Ayers & Pickering, 2001). Additional studies from Australia (Creedy, Schochet, & Horsfall, 2000) and the United Kingdom (Menage, 1993), plus a smaller study from the United States (Soet, Brack, Dilorio, 2003) suggest 2% to 6% of adult women will experience a PTSD reaction at some point in the early period following childbirth.

Symptoms of PTSD include re-experiencing the event (intrusion), avoidance of similar events, numbness, and hyperarousal (Holditch-Davis, Bartless, Blickman, & Miles, 2003). A diagnosis of PTSD, however, can be difficult because symptoms may occur months or years after the traumatic event and can persist for years (Schumann & Miller, 2000). Assessment of PTSD among adults reporting birth trauma have occurred at six months (Holditch-Davis, Bartlett, Blickman, & Miles, 1996), 10 months (Allen, 1998) and between 6 weeks to 14 years (Beck, 2004) which may capture both acute and chronic or delayed PTSD. Unfortunately, no special (or separate) diagnostic criteria for PTSD in children or adolescents exist (Tierney, 2000); therefore, PTSD is under-recognized in this population. What is known describes PTSD in the non-pregnant adolescent. Lifetime rates of trauma exposure approach 50% by late adolescence with rates of PTSD between 14.5%-27% among trauma-exposed non-pregnant teens (Seng, Graham-Bermann, Clark, McCarthy, & Ronis, 2005). Depression commonly follows PTSD in 25-70% of cases (Kilpatrick, D.G., et al, 2003).

PPD is likely underestimated in both adults and adolescents because of an unawareness of signs and symptoms and lack of treatment. As an overwhelming mood disorder, PPD begins in or extends into the postpartum period. This devastating health problem affects 12-15% of adult childbearing women worldwide (Hanna, Jarman, & Savage, 2004) and as many as 48% of adolescent mothers (Deal & Holt, 1998). As a precursor to PPD, prevalence rates for prenatal depression among adolescents range between 16% and 44%, or twice as high as among adult pregnant women (Szigethy & Ruiz, 1999).

PPD has been explored for several decades among adult mothers (O’Hara, 1986; Gotlib, Whiffen, Mount, Milne, & Cordy, 1989; Beck, 1992, 2001; Logsdon, McBride, & Birkimer, 1994; Ugarriza, 2002; Chich-Hsiu Hung, 2004) and over a shorter period among adolescents (Chen, Chou, Tseng, & Wang, 1999; Clemmens, 2002; Logsdon, Birkimer, Simpson, & Looney, 2005). Beck (2001) isolated 13 significant indicators related to PPD among adult women including prenatal depression, low self-esteem, limited social support, stressful marital relationships, and life stress. Indicators of PPD among teens may be similar to adult indicators. Among adolescents social support during pregnancy and labor and delivery has been shown to be negatively correlated with depression and positively correlated with life satisfaction during the weeks and months following childbirth (Stevenson, Maton, & Teti, 1999). In one study of primarily minority adolescents a lack of social support, low self-esteem (Koniak-Griffin, Walker & deTraversay, 1996), low partner support and school drop-out (Royer & Balk, 1996) were indicated as strong predictors of depressive symptoms postpartum.

Common symptoms characterizing PPD can include feelings of inadequacy, anxiety, despair, lack of energy, loss of interest in sexual activities, and compulsive thoughts (Beck, 1992). The manifestations of depressive symptoms can surface within the first few days after delivery or can become worse as long as six months or more after childbirth (Beck, 1993) or up to as late as three years post delivery (Murray, 1992). With the potential for a delay in signs and symptoms of PPD, it has been suggested that more research better delineate periods of peak prevalence and incidence with extended screening for up to one year for all postpartum mothers (Gaynes, et al., 2005).

A stressful prenatal period heightens the difficulties with postnatal adjustment and increases the potential for psychological sequelae which can lead to attachment disorders or even infanticide (Stein, 2000). A research focus in the area of maternal-infant attachment began decades ago. Beginning with observations among animal mothers...
and infants, humans later became the research target with exploration of attachment behaviors between mothers and premature infants, disabled infants, and multiple infants. Specific attachment behaviors were defined for mothers (and later for fathers). A picture describing the healthy, adult mother-infant attachment emerged. Much less research, however, describes maternal-attachment between infants and adolescent mothers or infants and mothers with PTSD, PPD or other psychological disorders.

A positive childbirth experience has been associated with enhanced maternal attachment (Mercer, 1986), and a negative childbirth experience can interfere with the mother’s adaptation to the maternal role and her future relationship with her infant (Sauls, 2004). While the range of birth experiences vary and the components defining a negative childbirth event differ per individual, perceived traumatic experiences have been shown to relate to both short and long-term implications for the mother’s mental health status and parenting abilities (Low, Martin, Sampselle, Guthrie & Oakley, 2003).

Ensuing depression affects the adolescent mother’s capacity to form and maintain relationships often leading to disengagement from maternal-child interaction and interfering with attentiveness and nurturing necessary for the infant to develop securely (Clemmens, 2002). PPD has been linked to a mother’s failure to respond to infant cues and to destructive relationships with children leading to poor cognitive and emotional development (Beck, 1995). A seminal research study by Beck a decade ago identified nine recurring themes from the descriptions of 12 postpartum depressed adult mothers. Mothers described themselves as being 1) unable to reach out to their infants, therefore, depriving them of any feelings of joy; 2) overwhelmed with the responsibilities of caring for the children; 3) in need of separation—both physically and emotionally—from the children; 4) unable to interact with their children and plagued with oversensitivity to stimuli; 5) guilty with irrational thinking during the day to day interactions with their children; 6) uncontrollably angry and holding a fear that they may harm their children; 7) aware that a detrimental relationship was being created with the other, older children; 8) enveloped by feelings of loss for the wanted relationships; and 9) second always to the needs of the children to minimize the effects of the PPD (Beck). Depressed (adults) mothers were noted to be less affectionate, less spontaneous and more constrained in their interactions with their infants than non-depressed mothers (Beck, 1996).

Older children exposed to maternal depression were found to have significant cognitive defects (Beck, 1996) and general depression (Evans, et al., 2005) as well. More recently research suggests a link between maternal depression and child sleeping problems (Dennis & Ross, 2005).

Mothers with anxiety disorders (broad category for PTSD diagnosis) commonly are seen to have both insecure adult attachments and insecure attachments with their children. Insecure attachment with children has been linked to both clinical and subclinical anxiety in children of a variety of ages (Evans, et al., 2005). Parenting styles have been seen as more controlling, with children rating their parents as less accepting (Evans et al.).

Research links within the adolescent population connect PTSD, major depression and violence (Boney-McCoy & Finkelhor, 1996; Kilpatrick, et al., 2003), violence and substance use (Quinlivan & Evans, 2001), maltreatment and adolescent pregnancy (Blinn-Pike, Berger, Dixon, Kuschel, & Kaplan, 2002), adolescent pregnancy and PPD (Deal & Holt, 1998) and poor maternal attachment and parenting. A history of childhood abuse (physical or sexual) has been associated with impaired maternal-infant interactions and inadequate parenting (Buist, 1998). Women partnered with violent men typically have more pregnancies, especially unplanned pregnancies. Unintentional pregnancies can result in poor material and neonatal outcomes. Teens commonly report violent relationships and experience unintended pregnancies. Pregnant adolescents who report a history of childhood or partner violence often carry the memories and learned behaviors of the past into motherhood and can be depressed or exhibit signs of acute or chronic PTSD prior to pregnancy, during pregnancy and after pregnancy.

Building a support system for teens is critical and can help prevent a traumatic childbirth and psychological consequences postpartum. High and consistent social support has been shown to be useful with PTSD and trauma recovery among adults (Foà & Riggs, 1993) and a strong buffer against PPD in adults and adolescents (Barnet, Joffe, Duggan, Wilson, & Repke, 1996). Providing psychosocial support benefits pregnant women by decreasing depressive symptoms (Gaynes et al., 2005) and with adolescents by decreasing stress, thereby, improving pregnancy and parenting outcomes (Gallagher, 1999). Adolescents of all ages site the need for support with pregnancy and parenting and generally rely primarily on their mothers, or the father of the baby, to provide what is needed. Unfortunately these individuals may not always be present. Conflict over the pregnancy can distance the teen from the parent(s) and the father of the baby; with an unplanned pregnancy, the father of the infant may chose to be uninvolved and not present at delivery. Sup-

“Building a support system for teens is critical and can help prevent a traumatic childbirth and psychological consequences postpartum.”
postpartum care issues that may present postpartum include increased maternal stress and violence and, perhaps, increased substance use as a means to cope, resulting in infant failure to thrive, child abuse and child neglect. Helping the teen experience a positive childbirth through a desire to connect with others for symptom normalization (Scrandis, 2005). Across cultures women value the need for connection. Hispanic women seek social support first from family and friends and then from special neighbors, close family friends and siblings (Martinez-Schallmoser, MacMullen & Telleen, 2005). “Careful, culturally sensitive nursing care and planning for inclusion of social support strategies may increase the likelihood of a well-adjusted mother and infant” (pp.759).

With limited or no prenatal care, risk factors for PTSD and PPD can be missed by healthcare providers. The prevalence, co-morbidity and risk factors associated with PTSD, PPD, violence, substance use and poor maternal-infant attachment are recognized. Clinical implications suggest the need for support, guidance and education to teens facing childbirth and extended care in the postpartum period. Labor and delivery nurses can encourage teens to talk about their childbirth experience and help them fill-in any missing pieces (Bryant, et al., 2008). This may assist in modifying, or forming, a more realistic perception of the event. Assessment of childbirth trauma requires follow-up for postpartum mood disorders (PPD), easily provided by telephone. Additional postpartum care issues that may present postpartum include increased maternal stress and violence and, perhaps, increased substance use as a means to cope, resulting in infant failure to thrive, child abuse and child neglect. Helping the teen experience a positive childbirth through a sense of mastery of the event and a feeling of accomplishment defines the goal of childbirth. A continued strategy of support postpartum can enhance maternal and newborn outcomes for the future.

References


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Program Evaluation
The purpose of this educational activity is to assist professional nurses in their efforts to more fully comprehend the potential psychological consequences, including PTSD and PPD that can occur when adolescents go through childbirth. The nursing approaches that can be effectively used with these patients will help nurses to intervene and assist the adolescent mother in her recovery and future health maintenance.

Objectives
At the completion of the article and the posttest, the reader should be able to:
1. Identify the incidence/prevalence of posttraumatic stress disorder (PTSD) and postpartum depression (PPD) among adult and adolescent mothers.
2. Identify signs and symptoms of PTSD and PPD.
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4. Discuss the linkage between traumas/abuse PTSD and PPD for effective nursing assessments.
5. Compare childbirth experiences between adult and teens.
6. Describe three appropriate and effective nursing interventions including resources/referrals.

Please rate how well the above objectives were met by circling the appropriate number:

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State the number of minutes it took you to read the article and complete the test and evaluation ______ min.

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1. Read the article.
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Article: Psychological Consequences of Childbirth Among Adolescents

1. To adolescents the hallmark of their childbirth experience is related to the following:
   A. Their loss of control during childbirth
   B. The support of their care provider
   C. The management of pain
   D. The length of labor

2. In labor teens are most appreciative of:
   A. Their loss of control during childbirth
   B. The support of their care provider
   C. The management of pain
   D. The length of labor

3. According to the literature, a positive perception of childbirth is based on which of the following:
   A. Planned pregnancy, father of the baby near-by and pain management
   B. A short labor and rest after the event with no company
   C. Younger maternal age, good self-esteem, and perception of control
   D. Increased maternal confidence and decreased maternal stress/anxiety

4. The rate of postpartum depression (PPD) among teens have been found to be close to:
   A. 50%  B. 75%  C. 35%  D. 15%

5. Factors precipitating birth trauma could include:
   A. Adequate pain management
   B. Delivery of an ill infant
   C. A feeling of being in control
   D. Adequate supports

6. Considering the symptoms of posttraumatic stress disorder (PTSD), the following request by an expectant mother may indicate past unresolved PTSD:
   A. “I am hoping to get pregnant again next year so my children are close in age.”
   B. “I have always planned for a large family.”
   C. “I enjoy talking about my delivery to anyone who asks.”
   D. “I want an elective c-section with this delivery.”

7. Research has linked the following with poor maternal-infant attachment and parenting skills:
   A. Substance use and partner violence
   B. Stable mental health status
   C. Adequate support system
   D. Age, number of children, and racial-ethnic group

8. Which of the following is NOT one of the 12 indicators of PPD among adult mothers Beck identified in her research?
   A. Symptom normalization
   B. Dealing with the emotional stress related to intrusive thoughts
   C. A feeling of being in control
   D. Feeling of detachment and loss of interest

9. Support provided by the father of the baby has been found to be associated with:
   A. A rapid, repeat pregnancy
   B. Better use of consistent birth control
   C. Early initiation of prenatal care
   D. Completion of school

10. Postpartum women with depressive symptoms have shown a natural desire to connect with others for:
    A. Symptom normalization
    B. Someone to tell their stories to
    C. No reason, they don’t seek out others
    D. Validation of their reasons for additional pregnancies