Psychiatria Danubina, 2015; Vol. 27, Suppl. 1, pp 499–503 *Conference paper*

TEENAGE PREGNANCY: A PSYCHOPATHOLOGICAL RISK FOR MOTHERS AND BABIES?

Gwendoline Goossens[1], Caroline Kadji[2] & Veronique Delvenne[3]

[1]Université libre de Burxelles, Child psychiatry ,Hôpital Universitaire des Enfants Reine Fabiola (HUDERF), Brussels, Belgium

[2]Université libre de Bruxelles,Gynecology, Centre Hospitalier Universitaire Brugmann, Brussels, Belgium

[3]Université libre de Bruxelles, Hôpital Universitaire des Enfants Reine Fabiola, Brussels, Belgium

SUMMARY

Introduction: *Teen pregnancy remains a public health problem of varying importance in developing and developed countries. There are risks and consequences for teen parents and the child on the medical and socioeconomic level.*

Method: *We conducted a literature search on multiple databases, focusing on the risk and the consequences of teen pregnancy and childbearing. We used different combined keywords as teen pregnancy, teen mother, teenage parents, teenage childbearing, teenage mother depression. Our search included different type of journals to have access on different views (medical, psychological, epidemiologic).*

Results: *The teen mothers are more at risk for postnatal depression, school dropout and bad socioeconomic status. The babies and children are more at risk for prematurity and low birthweight and later for developmental delays and behavior disorders.*

Conclusions: *Pregnancy in adolescence should be supported in an interdisciplinary way (gynecologist, psychologist, child psychiatrist, midwives, pediatrician). We need further studies that allow targeting patients most at risk and personalizing maximum support.*

Key words: *teen pregnancy - teenage mother - teenage childbearing*

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INTRODUCTION

Teenage pregnancy is a situation of possible risk for Childbearing and difficulties in attachment. However the rate of teenage pregnancy is falling since the sixties, especially in the developing countries.

For the developed countries; the United States have the highest level of teenage pregnancy. As for Europe, England is highest, while Belgium has one of the lowest rates of teenage mothers.

Despite the overall rate decrease, there is a huge impact of these pregnancies on mothers and babies alike.

The proportion of teenage girls going through induced abortion in some european countries is higher than in the United States, where the mothers tend to keep their babies.

Many studies show disparities among these pregnancies: educational, socioeconomic and cultural factors play a role in the present and the future of the dyad mother/baby.

For better understanding these factors and their consequences in our country, it is very important to identify patients at risk and develop some suitable management guidelines.

In this paper, we review the literature on teenage pregnancies to identify risks and consequences of teen pregnancies and childbearing, and try to propose prevention.

METHOD

We conducted a review on PubMed, Science direct and the library of the Université Libre de Bruxelles from 1980 to 2015. Multiple keywords were used: teenage pregnancy, teen mothers, teenage childbearing, adolescent mothers, teen mothers depression, and teen pregnancy program.

As it is an interdisciplinary subject, we kept articles from medical, physiological, epidemiological, nursing, and economics journals.

RESULTS

We found about fifty articles and chose the ones that were closer to our study's subject.

Most of the studies found were conducted in developed countries with the highest rate of teen pregnancies: USA, England and Australia.

We will differentiate obstetrical risks, maternal risks and children risks

Obstetrical risks

For a long time, these pregnancies were considered by doctors at a very high risk on the medical, pediatric and psychological levels.

However, the current literature opposes this view: the rates of obstetrical and neonatal complications seem

to be low, especially when social management and specific guidance are offered.

Otherwise, several subgroups of patients have poorer pregnancies outcomes such as mothers under sixteen years old. They have more preterm birth and lower birth weight.

Sixteen is a critical age for the physical development of every teenage girl; the incomplete development of the pelvis plays a role in the onset of obstetrical complications and prematurity. The very young pregnant teenager remains considered as a high-risk group mainly if there is no follow up and social management (Molina 2010, Debras 2014) or if the young mother tends to smoke and have irregular and late prenatal care (Debras 2014).

In general, these teenage girls take less care of themselves; they smoke, eat junk food and have a less healthy lifestyle. Often they present anemia as a result of malnutrition (Whitworth 2010). Nevertheless, it is noticed that the delivery mode is more physiological, the labor is spontaneous, and there are less obstetric maneuvers and less caesareans.

In general, these very young mothers stay longer in the maternity unit. The adaptation to the new parent function need more intensive guidance and support and for a longer duration.

The multidisciplinary management of these pregnancies by obstetricians, pediatricians, psychologists, child psychiatrists, midwives and social workers improves the follow up and minimizes the risks (Debras 2014).

Maternal risk and consequences

Early motherhood is often linked to low socioeconomic status, social difficulties and low academic achievement (Wendland 2014).

Remaining in school may link adolescent mothers to the necessary resources, increase the feeling of connectedness with peers, and decrease the impression of loneliness and isolation that are associated with depressive symptoms (Reid 2007, Martin 2013).

Fifty percent of the teen mothers experience depressive symptoms within the 3 months after birth, which will decrease with time (Reid 2007).This rate is higher than in adult mothers where it is estimated between 20 and 28 percent.

The depressive symptoms include feelings of loneliness, sleep disorders, loss of appetite, emotional lability and even thoughts of harming oneself and/or the baby.

Many factors such as age, socioeconomic status and school attendance can contribute, all together, to the onset and the evolution of the depressive symptoms.

Mothers who have the support of their partners experienced less depressive symptoms (Martin 2013).

Establishing a social network has direct positive effects on the depressive symptoms by supporting the teen mother's self-esteem. However, it can also have adverse effects such as non-desirable or too heavy support leading to feelings of ineffectiveness and sadness aggravating the depression (Reid 2007).

Indeed, depression symptoms are strongly linked to their lack of confidence in their parenting skills and to the stress they feel (Reid 2007). In fact, the teenage mothers face a lot of obstacles that hurt their confidence: they are not mature enough, their abstract thinking is not highly developed and they usually come from dysfunctional families.

Maternal depression has also consequences on the mother/child interaction, on the mother's perception and response to the child's behavior. These children may develop later some behavioral disorders that place them at high risk of child abuse.

The influence of ethnicity on depression in adolescent pregnancies has been suspected but lacks of evidence were found in the studies (Michelle Schmidt 2006).

Children risks and consequences

In addition to direct consequences such as prematurity and low birth weight, there are some other serious impacts on the future of these children (Jutte 2010). The children of teenage mothers frequently live in single-parent poor environment, which may lead to high rate of behavioral and mental issues (Letourneau 2004).

The literature agrees that children born to teen mothers tend to have poor health, low cognitive development, worse educational outcomes and a high probability of becoming a teen parent themselves.

They are also at risk of having behavioral problems (Spieker 1999). These may be influenced by gender (boys are more susceptible) and by the mother's state of mind. At age six, children whose mother has depression or anxiety symptoms are at more risk of developing disruptive behavior disorder (Spieker 1999).

Age, education, moral values, financial resources and personal history are reported to be important ingredients for parenting skills of the young mothers.

Teenagers may have less consideration of the long-term nature of child development that may affect their parenting efficiency and cause them to feel detachment, frustration and disappointment with their children's achievements.

Other studies show some of the children born from teenage mothers have normal development until the age of 12 months of age, but intellectual and development delays appears at the age of three years (Rayan-Krause 2009).

Because of different factors (low educational level and socioeconomic status), teenage mothers tend to use more commands and less affectionate verbal language. This leads to language impairment issues in preschool (Letourneau 2004).

Research indicates that many children of these mothers are at risk of developmental and behavioral delays and suggests that there is a lack of knowledge of

the child development process (Rayan-Krause 2009). This can influence the children's cognitive and emotional development and may cause other consequences later on like poor performance in school and inappropriate behavior (aggression, acting out, externalizing behavior, conflict with other children…) (Lounds 2006, Putnam-Hornstein 2014).

These children of teenage mothers are at risk for child abuse, teenage mothers are more punitive in their discipline strategy, they are less nurturing, they often perceive their child's temper as more difficult (Letourneau 2004). Other high risk factors can be found for child abuse such like low socioeconomic status, mothers with a history of abuse in their own childhood and a bad mother-child interaction.

Impact of the multiple sources of support

It is recognized that the social environment, partner, family, peers, social support is essential for the well being of the young mother and her child and her key element in the process. The announcement of the pregnancy to the family is always a time of crisis; some families provide support and care, and for others, it provoke breakdown in the family, in school or even with friends. The future of mothers living in couples or in cultural traditions where the pregnancy is accepted, is the same as adult mothers having the same marital or socioeconomic status (Mignot 1999).

The lack of social support is associated with high level of stress and anxiety, which not only affect the pregnancy, but also have a negative influence on the future relationship between the mother and her baby.

Support of the family members appears to reduce the stress among adolescent mothers, enhance the parent-child relationship and promotes the infant development (Letourneau 2004).

Some studies show a protective effect of living with the parents in the perinatal period for the mother and the baby (Buman 2008). Other studies suggest that the child grandmother is of an important social support resource; she may enhance the interactive relationship between teenage mother and her infant. Help with childcare from the grandmothers and the extended family is a key indicator of a good quality parent-infant interaction (Letourneau 2004).

However, many teenage mothers who recognized their mothers as a source of support also recognized them as a source of conflict and stress.

Teenage mothers, playing the double role of the mother and the child, may exhibit feelings of resentment toward the grandmother, and so experience negative parent-newborn bonding. Co-residence with the grandmother has been linked to increased conflict, diminished sense of independence and self-confidence in parenting-abilities (Reid 2007), and poor child functioning (Letourneau 2004), with an excess of behavioural problems among depressed teenage mother's children living in a 3-generation household (Black 2002). This suggests that depressed teen mothers should eventually move into an independent household when they reach adulthood. Social support during this process is vital (Buman 2008).

The role of the partners is equally important and may have an impact on the pregnancy with a better prenatal care (Sah 2014) and later on the relationship between the mother and the child.

Living in a nuclear family provides strong social support, better child raising attitudes and positive mother-infant interaction. Partner support also ensures a good responsiveness to the infant and a better maternal self-fulfillment that enhance the children's developmental outcomes. Unfortunately however, the relationship between both parents is often short-lived in teen parents (Letourneau 2004).

Very few studies consider the fathers of the teenage mothers' babies.

In general, they are subject to a series of prejudices of irresponsible sexuality, careless behavior and little involvement or concern for the pregnancy. However, these fathers live their own and unique parenthood experience according to his personal, family, cultural and socioeconomic conditions. In general, they also come from low socioeconomic and educational status and precarious families.

They may feel a sense of obligation to the mother and their children, which urges them to take more responsibility. But they can also feel unprepared, powerless, unrecognized and dependent on the mothers or the grandparents. In fact, several studies have shown that the mother and the grandparents heavily influence the involvement level of a young father in child rearing as well. These may encourage or restrict paternal contact with the child (Rhein 1997). The father may be excluded from decision-making, especially with late pregnancy announcement. They can feel betrayed, ask for abortion or leave the mother.

Nevertheless, most of the fathers want to be involved with the pregnancy and later with the babies and their mothers (Wendland 2011). Few studies show a real concern of the fathers to provide for their children and to be there for them.

DISCUSSION

Teenage pregnancy has obstetrical risks in term of prematurity and lowbirth weight. The younger the age of the mother the higher the risk is. The literature agrees that sixteen is a turning point, probably due to the incomplete maturity of the mother's body.

The prenatal care is less regular and happens later than for adult mothers; we may think it is because of the less mature socio-emotional development and the less responsible behavior of the young mother.

The teenage mothers usually come from poor socioeconomic conditions and dysfunctional families. They exhibit more identity diffusion, coping difficulties, less autonomy and low self-esteem.

They experience a "dual developmental crisis" in which the tasks of adolescence conflict with the task of early parenthood! That results in limited emotional availability for their infants (Letourneau 2004).They lack knowledge about child development, which can cause disappointment with the child behavior, wrong responds to the child (yelling, threatening…) and sometimes even child abuse.

The mothers often experience symptoms of depression that can increase their feelings of inefficacity and bad parenting.

The children often have poor school achievement, behavioral disorder, relational disorder with peers and are at risk of global developmental delays.

It seem that all these factors (socioeconomic status, school achievement, emotional status) influence each others and it is complicated to clarify which is the cause and which is the consequence.

The social support enhances the outcomes for the mother and her baby: less depression and more self-esteem, increasing parental skills for the mother, less behavioral disorder, better mother-child relationship and less developmental delays for the baby. The main source of this support is the baby maternal grandmother and the baby's father, or another partner eventually.

So, there are huge risks and consequences for a teenage pregnancy. However, some authors point out that not all teenage mothers and children have adverse outcomes and that many have no issues. These authors note that most of the studies that focus on the negative outcomes run the risk of stigmatizing all teenage parents and thereby contribute to the negative outcomes which they seek to redress (Shaw 2006).

In the developed countries, especially those with the highest level of teenage pregnancies such as the United States or England, there are multiple programs that support the teenage mothers and their children. Many studies indicate that parenting programs are effectively improving a range of outcomes for both teenage parents and their infants (Coren 2003). Some of these programs, especially the ones at school talk about parenting class, perhaps this theorizes something rather emotional: parenting is more about feeling than theory learning. Linking parenting to school where the mother might have already failed can increase all the bad feeling she may have.

In Belgium, we do not have any guideline to take care of these teenage mothers, maybe because of our low rate. However, it seems that we begin to think about it and The Office of Birth and Childhood just started a new project named "how to accompany teen parenthood".

CONCLUSIONS

All the articles we found go in the same direction and agree on the risks and the consequences of teen pregnancies for the mothers and the infants. The fathers are not enough studied despite the important role they play.

The management of the teenage pregnancy and teen parents has better outcomes when it is multidisciplinary.

Belgium has low rate of teenage mothers although non-negligible, it is important to evaluate the situation of teen pregnancy in our country to ensure the development of preventive action to mother, child and father.

Acknowledgements: None.

Conflict of interest: None to declare.

References

1. *Black M, Papas M, Hussey JM, Dubowttz H, Kotch JB, English D, et al.: Behavior and development of preschool children born to adolescent mother: risk and 3-generation household. Pediatrics 2002; 109:573-580.*
2. *Buman M, Cox J, Valenzuela J, Pierre Joseph N, Mitchell A & Woods E: Depression, Parenting Attributes, and social Support among adolescent Mother Attending a Teen Tot Program. J Pediatr Adolesc Gynecol 2008; 21:275-281.*
3. *Coren E, Barlow J& Stewart-brown S: The effectiveness of individual and group-based parenting programmes in improving outcomes for teenage mothers ans their children: a systemic revieuw. J Adolesc 2003; 26:79-1043.*
4. *Debras E, Revaux A, Bricou A, Laas E, Tigazin A, Benbara A, et al.: Devenir obstetrical et neonantal des grossesse chez les adolescentes: cohorte de patientes en Seine-Saint-Denis. Gynecologie obstetrique & fertilité 2014; 42:570-584.*
5. *Jutte D, Roos N, Brownell M, Briggs G, MacWilliams L & Roos L: The Ripples of Adolescent Motherhood: Social, educational and medical Outcomes for children of teen and prior teen mothers. Acad Pédiatr 2010; 10: 293-301.*
6. *Letourneau N, Stewart M & Barnfather A: Adolescent mothers: Support needs, Ressources and Support-Education Interventions.J Adolesc Health 2004; 35:509-525.*
7. *Lounds J, Borkowski J & Whitman T: The Potential for Child Neglect: The case of adolescent mothers and their children. Child Maltreatment 2006; 11:281-294.*
8. *Martin A, Brazil A & Brooks-Gun J: The socioemotional outcomes of young children of teenage mothers by paternal coresidence. J Fam Issue 2013; 34:1217-1237.*
9. *Michelle Schmidt R, Wienmann C, Rickert V & O'Brian Smith E: Moderate to severe depressive symptoms among adolescent mothers followed four years postpartum. J Adolesc Health 2006; 38:712-718.*
10. *Mignot C: La grossesse chez l'adolescente. J Pediatr Puericulture 1999; 6:353-58.*
11. *Molina RC, Gonzales Roca C, Sandoval Zamorano J & Gonzales E: Family planning and adolescent pregnancy. Best practice & research clinical obstertrics and gynecology 2010; 24: 209-222.*
12. *Putnam-Hornstein E, Cederbaum J, King B, Eastman A & Trickett P: A population level and longitudinal study of adolescent mothers and intergenerational maltreatment. Am J Epidemiol 2014; 181:496-503.*

13. Rayan-Krause P, Meadows-Oliver M, Sadler L& Swartz M: Developmental Status of Chilren of Teen Mothers: Contrasting Objectives Assessments with Maternal Reports. J Pediatr Haelth Care 2009; 23:303-309.
14. Reid V & Meadows-Oliver M: Postpartum depression in adolescent Mothers: an Integrative Revieuw of the Literature. J Pediatr Health Care 2007; 21:289-298.
15. Rhein L, Ginsburg K, Schwartz D, Pinto-Martin J, Zhao H, Morgan A, et al: Teen father participation in child rearing: Family perspectives. Jour Adolesc Health 1997; 21:244-252.
16. Roye C & Balk S: The relationship pf partner support to outcomes for teenage mothers and their children. J adolesc Health1996; 19:86-93.
17. Sah M, Gee R & Thealt K: Partner support and impact on birth outcomes among teen pregnancies in the united states. J Pediatric Adolesc Gynecol 2014; 27:14-19.
18. Shaw M, Lawlor D & Najaman J: Teenage children of teenage mothers: psychological, behavioural and health outcomes from an Australian prospective study. Sco Sci Med 2006; 62:2526-2539.
19. Spieker S, Larson N, Lewis S, Keller T & Gilchrist L: Developmental trajectories of Disruptive behaviour Problems in Preschool Children of Adolescent Mothers. Child Development 1999; 70:443-458.
20. Wendland J & Centenaro Levandowski D: Adolescent parenthood: Determinants and consequeces. L'evolution psychiatrique 2014; 79:411-419.
21. Wendland J & Levandowski D.C: Adolescent fathers: The forgotten side of adolesent pregnancy. Neuropsychiatrie de l'enfance et de l'adolescence 2014; 59: 433-438.
22. Whitworth M & Cockerill R: Antenatal Management of teenage pegnancy. Obstetric, gynaecology and reproductive medecine 2010; 20:323-328.

Correspondence:

Gwendoline Goossens, MD, Child psychiatrist
Université libre de Bruxelles, Child Psychiatry Service,
Hôpital Universitaire des Enfants Reine Fabiola
Brussels, Belgium
E-mail: gwendoline.goossens@huderf.be