Teenage pregnancy considerations

Felicia Molokoane
Maternal and Fetal Subspecialty, Department of Obstetrics and Gynaecology, University of Pretoria, Pretoria, South Africa

Introduction
Teen pregnancy has serious consequences for young women, their children and communities as a whole. Teenage pregnancy is defined as a teenage girl, usually within ages of 13 – 19, becoming pregnant. This refers to girls who have not reached legal adulthood, who become pregnant. A significant number of these pregnancies are unplanned and unwanted. This contributes to the high maternal mortality plus obstetric complications and the burden of unsafe abortion. Teenage pregnancy is the leading cause of mortality in girls aged 15 to 19 years, and 90% of the deaths are occurring in low to middle income countries and most of them are preventable.1 Too early childbearing increases the likelihood of dropout from school, making individuals less likely to pursue education further or skills training because they fail to balance motherhood and schooling. This limits their job opportunities and financial self sufficiency leading to a continuing cycle of poverty and inequality.

Prevalence of teenage pregnancy
Patients aged 15 – 19 years old account for having 11% of all births worldwide. Every year, about 16 million girls aged 15 – 19 and 1 million girls under 15 give birth. The highest rate of teenage pregnancy in the world is 143 per 1,000 girls aged 15 – 19 years in sub-Saharan Africa. In South Africa, the birth rate for teenagers has declined from 35% in 1998 to 28% in 2015.2 The age specific fertility rate for teenagers was 71 births per 1,000 for women aged 15 – 19, showing little change since 1998.2

Causes of teen pregnancies
Causes of teen pregnancies may vary in developed countries as compared to developing countries. Factors that contribute to teenage pregnancies include:

- Customs and traditions that lead to early marriage
- Adolescent sexual behavior which may be influenced by alcohol and drugs
- Lack of education and information about reproductive sexual health including lack of access to tools that prevent pregnancies
- Peer pressure to engage in sexual activity
- Low self esteem
- Poor access to contraceptives or incorrect use of contraception
- Judgemental attitudes of health care workers, teachers and community members
- Poverty
- Exposure to abuse and violence and family strife at home
- Low educational ambitions and goals

Consent and Confidentiality
The concepts of informed consent and confidentiality are complex when the patient is a teenager. This is particularly true when the needs and wishes of the teenager conflict with the opinions and preferences of the parents. Respecting the autonomy and confidentiality of teenagers may be complicated by the care setting and the surrounding environment. So, clinicians who treat teenagers should be familiar with the consent and confidentiality policies and must be aware of potential ways in which confidentiality can be compromised (e.g., record keeping, billing statements, insurance). It is also important to encourage the teen to talk to her parents about these sensitive and personal issues that affect her health even if doing so may be uncomfortable. Parental support can help by ensuring that the teen’s health needs are met. A decision to violate confidentiality and disclose information should be taken after careful consideration and with the intent of beneficence. If the clinician intends to disclose information, he/she should discuss the reasons for disclosure with the patient and allow the patient to participate in the decision of to whom and in what manner the information should be told.3

What do South African policies say?
South Africa has a relatively progressive legislative response to teenage pregnancy and motherhood. Both schools and learners need to be well informed to ensure that pregnant learners are able to get quality education that is free of prejudice and stigmatisation.

The South African Children’s Act (2005) (as amended by the Children’s Amendment Act (Sexual Offences Act) (2007)) came into effect, with regulations, on 1 April 2010. It allows children over 12 years to access healthcare services, including HIV testing and contraceptives.

The Criminal Law (Sexual Offences and Related Matters) Amendment Act (Sexual Offences Act) (2007) protects children and adults from non-consensual sex. The age at which a child is considered mature enough to engage in sexual activity is 16, even when sex is consensual. Any adult having sex with a child under this age is committing a crime.


Correspondence
Felicia Molokoane
email: Felicia.molokoane@up.ac.za

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to stay in school while pregnant and return to school after childbirth.

The Promotion of Equality and prevention of Unfair Discrimination (Act No. 4 of 2000) stipulates that school girls who become pregnant should not be unfairly discriminated against.

Current law for minors and consent for treatment

**Surgical treatment**: A child of 12 or older may consent to a surgical operation with the parent’s or guardian’s assent. The patient’s consent and parent’s assent must be in writing and signed. In an emergency, where the person with parental responsibility is not available to give consent, required treatment may proceed with the consent of the superintendent of a hospital, or the person in charge if the superintendent is unavailable.

**Medical treatment**: A child of 12 or older may consent to medical treatment. Patients may consent to surgery without the need for parent’s consent. The patient must be mature enough to understand the implications of undertaking the proposed treatment. If she lacks capacity a care-giver can consent on her behalf. Failing that, the clinical head of a hospital can give consent.

**Request for contraception**: In terms of the National Contraception Policy of 2001, children of any age can approach the clinic for sexual and reproductive health information and condoms. Children of >12 can be prescribed any form of medical contraception without the assistance or knowledge of their parents or guardians.

**Termination of pregnancy (TOP)**: A girl of any age can request TOP, but if she is a minor, she should be advised to consult with her parents or guardian.

**Request for sterilisation**: Age at which a patient can consent for sterilisation is 18. Minors may only be sterilized if their life would be jeopardized or their health seriously impaired by a failure to do so.

1. Antenatal care

It is important to not miss a diagnosis of pregnancy in teenagers who presents to the clinics with vague complaints, as early detection and referral to a higher level of care is vital and can help in decreasing perinatal complications. After the diagnosis of pregnancy is made, it is important to begin addressing the psychosocial as well as medical aspects of pregnancy. Counseling is important, must be done in a respectful, nonjudgmental and open manner, by using simple language free of jargon. The teenager should be counseled, without specific consideration of their age, about their options for continuation with the intent to parenting, adoption or termination. The TOP Act states that only the women’s consent is needed for TOP and in cases of a minor, only the minor’s consent is needed subject to advising such a minor to consult with the parents.4 Pregnancy terminations implemented early in pregnancy are less risky and less expensive. Clinicians who are uncomfortable in presenting options to their young patients should refer them to a provider who can provide the service.

Teenagers who decide to continue with pregnancy, or are uncertain whether they will continue with pregnancy should be given folic acid containing prenatal vitamins and counseled about the adverse effects of alcohol, drugs and smoking on the developing fetus.

Pregnant teenagers should be offered the standard antenatal care packages as recommended by the National Institute for Health and Clinical Excellence (NICE). Since teenagers are vulnerable, an additional antenatal care is helpful including multidisciplinary team approach, ideally including: advanced midwife, obstetrician and a social worker.

1.1 Sexually transmitted infections
Teenagers are at highest risk for sexually transmitted infections (STI’s) and HIV infection because they frequently have multiple partners, have unprotected intercourse, married to older men with more sexual experience and face multiple obstacles to utilize health care. In pregnancy, STI’s have been associated with preterm delivery (PTD), chorioamnionitis and puerperal sepsis.

1.2 Smoking and substance abuse
Teen pregnancies have higher rates of smoking and substance abuse than their adult counterparts. The clinicians should assist with smoking cessation by educating a teen smoker on the negative effects of nicotine on the developing fetus and encouraging her to stop.

1.3 Violence and coercion
Violence in pregnancy is associated with late engagement in prenatal care and increased risk of adverse pregnancy outcomes such as low birth weight (LBW), preterm birth (PTB), fetal death and postpartum depression.

1.4 Mood disorders
Depression is diagnosed in 4% to 8% of adolescents. In pregnancy, the rate of depression varies from 16% to 44%, almost twice as high as among adult pregnant women. It is important to identify a history of mental health problems and enquire about mood to identify possible depression. Depressive symptoms among pregnant adolescents may become more severe between the second and the third trimesters.2 Teenage mothers are also three times more likely to develop postnatal depression than older mothers.

1.5 Anaemia and nutritional care
Anaemia is a very common complication in pregnant adolescent, with reported prevalence of 50% to 68%, usually attributed to depleted bone marrow stores of iron.6 It is essential to check maternal ferritin and folate levels, in addition to routine maternal haemoglobin concentration at booking.

Adequate nutrition during pregnancy is necessary to optimize maternal, fetal and infant health. Pregnant teens are at risk for nutritional deficiencies. They have increased nutritional needs related to normal pubertal changes and poor diet quality, with insufficient intake of micronutrients and excess intake of total fat, saturated fat, and sugar.

**Treatment**

- Adequate energy intake
- Iron supplementation
- Folic acid intake, to prevent some congenital abnormalities
- Calcium intake. It is an important determinant of bone mineralization and bone density. Adequate intake of calcium in non pregnant and pregnant adolescent (14 – 18 years) is 1300mg per day
- Vitamin D. There is evidence that improved antenatal vitamin D may have a wider beneficial impact on childhood health including the risk of osteoporotic fracture.

Teen mothers have low rates of age related chronic disease (diabetes or hypertension). They also have lower rates of twin pregnancies than older women.
Impacts
Research indicates that pregnant teens are less likely to receive prenatal care, often seeking it only in the third trimester. This results in high incidence of PTB, LBD, stillbirths and complications of preeclampsia. Teen pregnancies cause adverse outcome especially in the 13 – 16 age group, with the risks being higher in young adolescent with poor nutrition and immature physical development. The rate of neonatal death for teen pregnancies, which include stillbirths as well as infant death up to 28 days old, is roughly three times that of adult pregnancies. Whether these outcomes are the result of biologic immaturity or socio-demographic factors related to teen pregnancy, remains unclear.

The teen pregnancies have a disproportionate risk of medical complications in pregnancy compared with adult women (Table 1).

Table 1. Increased risks in teen compared with adult pregnancies.

<table>
<thead>
<tr>
<th>Pregnancy complications</th>
<th>Maternal death</th>
<th>Anaemia</th>
<th>Preeclampsia/eclampsia</th>
<th>Gastrochisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teen parent outcomes</td>
<td>Less likely to graduate from high school</td>
<td>Lower earnings</td>
<td>High rates of substance abuse</td>
<td>Increased prevalence of mood disorders (mothers)</td>
</tr>
<tr>
<td>Neonatal outcomes</td>
<td>Preterm birth</td>
<td>Low birth weight</td>
<td>Stillbirth</td>
<td>Neonatal death</td>
</tr>
<tr>
<td>Infant/childhood outcomes</td>
<td>Increased infant death</td>
<td>Increased risk of abuse and neglect</td>
<td>Decreased academic achievement and cognitive ability</td>
<td>Increased incidence of mental illness and substance abuse</td>
</tr>
</tbody>
</table>

2. Intrapartum care
A recent Swedish survey found that adolescents are more likely to be delivered vaginally than older women and the risks of placenta praevia, postpartum haemorrhage (PPH), and perineal rupture are lower for adolescent than for adult women. Neonates of teenage mothers have less fetal and perineal rupture are lower for adolescent than for adult risks of placenta praevia, postpartum haemorrhage (PPH), likely to be delivered vaginally than older women and the A recent Swedish survey found that adolescents are more likely to be delivered vaginally than older women.

3. Postpartum care
The teen parenthood is associated with a range of adverse outcomes for young mothers, including mental health problems such as depression, substance abuse and posttraumatic stress disorder (PTSD).

3.1 Contraception
Teen pregnant mothers are at significant risk for the repeat pregnancy, with 25% becoming pregnant again within 2 years of delivery. Protective factors against the repeat pregnancy include use of long acting reversible contraception (LARC) via either intrauterine device or implant. Implanon has a pregnancy rate of <1 in 1000 over three years. It can be inserted up to day 21 postpartum with immediate contraceptive protection and can be used safely during breastfeeding. Care needs to be taken when during DepoProvera in this age group, because of increased risk of osteoporosis. LARC is more cost effective than combined oral contraceptive pill (COCP), and increasing use of LARC will reduce the number of unwanted pregnancies. Repeated pregnancy leads to higher risk of PTB, mental health issues, and developmental problems among children.

3.2 Breastfeeding
Breastfeeding has important health benefit for both mother and baby. Babies who are not breast-fed have higher rates of gastrointestinal, middle ear and urinary infections, childhood diabetes and obesity.

3.3 Postpartum depression
Teen mothers are at high risk for post-partum depression. Depression seems to be greater with additional social stressors and with decreased social support.

Long term effects
A population based study cohort study from Sweden reported teenage mothers were at increased risk of premature death later in life compared with older mothers. The increased risk was attributed to both social and biologic factors and included lung and cervical cancer, ischaemic heart disease, suicide, inflicted violence and alcohol abuse.

The outcome of children born to teen mothers
Many children born to teen mothers have behavioural problems that may be seen as early as the preschool period.

- More likely to have health and cognitive disorders
- Poor academic performances and repeat grade
- Neglected or abused
- Deficits in social development
- Females are more likely to become teen parents; males have a higher rates of incarceration.

Pregnancy Prevention
Teen pregnancy is a multifaceted problem that requires multidisciplinary approach. The provision of contraception and education about fertility risk is important but insufficient to address the problem fully. Family and community involvement are essential elements for teen pregnancy prevention.

Lists of common components of programs to prevent teen pregnancy:

- Information about benefits of abstinence: aims to teach teens to wait until marriage to initiate sexual activity
- Information about contraception for those already sexually active
- Information about signs and symptoms of STI’s and how to prevent STI’s
- Interactive sessions on peer pressures
- Teach teenagers about communication skills

Sex education and teaching contraception do not lead to an
increase in sexual activity. Secondary prevention aims to prevent recurrent pregnancies and the associated problems, including low maternal education achievement, increased dependence on government assistance, low infant birth weight and increased infant mortality. Factors associated with increased risk of repeated teen pregnancy include not returning to school within 6 months of delivery, being married to or living with a male partner, not using LARC within 3 months of delivery and having peers who are adolescent parents.12

Conclusion
Teenage pregnancy, although on the decline, remains a major public health concern. Often teenagers present late to prenatal care, either from lack of knowledge, fear of consequences, limited access to healthcare and stigma. For many teenagers, pregnancy is unplanned and challenging life event. Those having unplanned pregnancies are at risk of repeat pregnancy, especially in the 2 years after delivery.

Teen mothers face higher risk of LBW, PTD, stillbirth, preeclampsia as well as social isolation. The risks can be minimized with multidisciplinary team, early prenatal care and nonjudgmental detection of pregnancy. Contraception, with specific attention to LARC, should be considered to prevent unintended first and repeat pregnancies.

References
1. WHO. Adolescent Pregnancy. Key facts. 2018
2. South African Demographic Health Survey 2016, release 15 May 2017