Antenatal management of teenage pregnancy

Melissa Whitworth

Ruth Cockerill

Harriet Lamb

Abstract

Both the under 18 conception and birth rates are falling. However, despite this the United Kingdom has a high rate of teenage pregnancy compared to similar countries in Western Europe. Young mothers and their babies have poorer access to maternity care and experience worse obstetric outcomes than older mothers. It is likely that the risks associated with teenage pregnancy reflect a significant interplay between the socio-demographic status of many of these teenagers, their nutritional status and their uptake of antenatal care. This review looks at the complications associated with teenage pregnancy and how the implementation of specialized antenatal care aims to improve outcomes.

Keywords antenatal care; complications; risk factors; teenage pregnancy

Introduction

Teenage pregnancy carries high risks to both mother and baby. Globally, around 50,000 teenage girls die each year during pregnancy and childbirth and the latest available estimates suggest around one million babies born to adolescent girls die before their first birthday. The rate of teenage pregnancy in the United Kingdom is higher than that of other similar Western European pregnancies. However, the rate of conception for under 18s is currently at its lowest since 1989 (the first year for which comparable data is available); with a >50% reduction in rate of teenage pregnancy between 1989 and 2014. The most recent available data (2014) also demonstrates a 6.8% decrease in conception rate in this age group compared to the previous year. The decreasing conception rates have been attributed to government investment in programmes aimed at improving the aspirations of young women to continue education and the continued perceived stigma associated with teenage pregnancy. Teenage pregnancy rates vary in different areas of the UK and a link between social deprivation and teenage pregnancy is well recognized, both as a cause and consequence. Pregnant teenagers often have difficulties accessing maternity services and as a result, their pregnancies are associated with increased adverse outcomes and poorer long term health problems. However, research has demonstrated that by engaging with these young women and their partners, and effectively meeting their antenatal care needs, health outcomes can be improved.

Melissa Whitworth *BSC (hons) MB ChB (Hons) MD MRCOG is a Consultant Obstetrician at Saint Mary's Hospital, Manchester, UK. Conflicts of interest: none declared.*

Ruth Cockerill *MB BCh MRCOG is a Clinical Research Fellow in Obstetrics and Maternal Medicine at Saint Mary's Hospital, Manchester, UK. Conflicts of interest: none declared.*

Harriet Lamb *MB BCh is a Clinical Fellow in Obstetrics and Gynaecology at Saint Mary's Hospital, Manchester, UK. Conflicts of interest: none declared.*

Teenage pregnancy strategy and government targets

In 1999 the UK Government launched the Teenage Pregnancy Strategy which represented the first coordinated attempt to tackle both the causes and the consequences of teenage pregnancy. The strategy's targets were to

- Halve the under-18 conception rate by 2010.
- Increase the proportion of teenage parents in education, training or employment to reduce their risk of long-term social exclusion.

Whilst these targets were not met, there was a national reduction in the under-18 conception rate of 13.3% and a 25% decrease in the under-18 birth rate during the life of the strategy (Figure 1). The strategy ended in 2010 but teenage pregnancy has remained an area of policy interest and the under-18 conception rate is one of three sexual health indicators in the Public Health Outcomes Framework (2013–2016) and a national measure of progress on child poverty. The aims are to continue to reduce teenage conception rates and provide all young people with information and education to enable them to make informed decisions. Significant numbers of teenagers continue to require antenatal care and it is essential that such care is appropriately tailored in order to maximize the long-term health and social outcomes of both teenage parents and their children.

Risk factors for teenage pregnancy

Teenage parents come from a wide range of backgrounds; for some teenagers, of certain social or ethnic groups, pregnancy is a lifestyle choice. However, teenage parents are disproportionately more likely to have a history of social exclusion and disadvantage, and it is important to consider the factors outlined in Table 1 when interacting with them.

What impact does being a teenager have on pregnancy outcome?

Although the maternal mortality rate of teenagers is lower than any other age group, the most recent perinatal mortality report for England, Wales and Northern Ireland showed that this group of mothers were 1.32 [95% CI: 1.11, 1.56] times more likely to have a stillbirth and 1.38 [95% CI: 1.06, 1.78] times more likely to have a neonatal death than mothers aged 30–34. The infant mortality rate of term/post term babies born to mothers under 20 years is almost twice that of those born to mothers aged 30–34. Babies born to teenage mothers are also more likely to be born prematurely and are twice as likely in the long-term to be admitted to hospital as a result of accident or gastroenteritis. The impact of the father on pregnancy outcome must also be acknowledged. Babies of teenage fathers are at increased risk of premature birth, low birth weight and neonatal death independent of the mother's age. Moreover, a young father's attitude and behaviours have a strong influence on the health of the teenage mother and the baby.

Please cite this article in press as: Whitworth M, et al., Antenatal management of teenage pregnancy, Obstetrics, Gynaecology and Reproductive Medicine (2016), http://dx.doi.org/10.1016/j.ogrm.2016.11.005

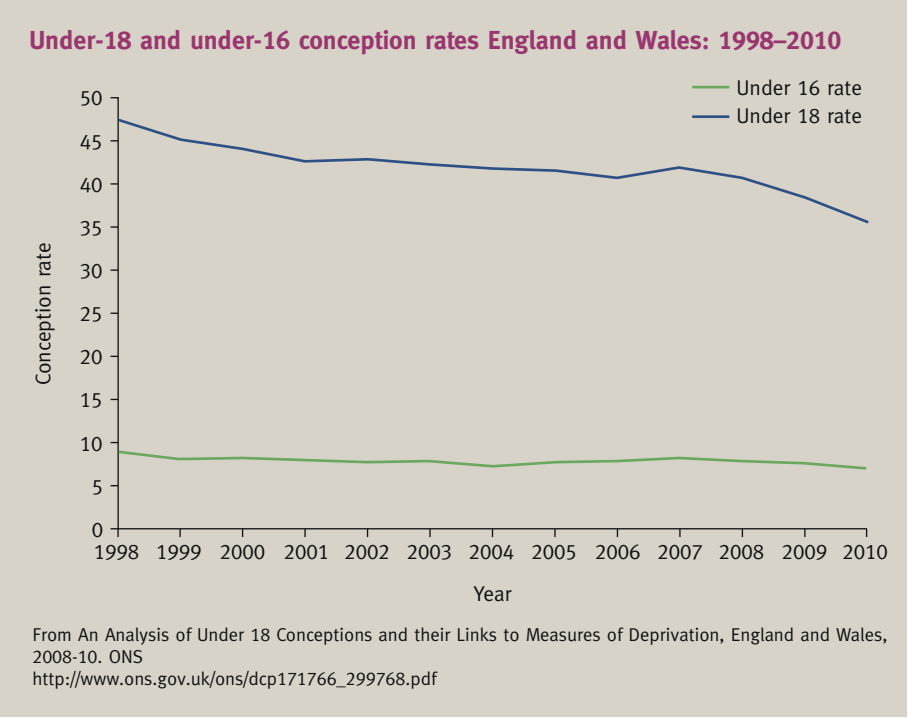

Figure 1

Factors associated with teenage pregnancy

Compared with older mothers teenage mothers are more likely to	Compared with older fathers teenage fathers are more likely to
Be the child of a teenage mother	
Have learning difficulties	
Have mental health problems	
Have a deprived background	
Currently be a looked after child or have been a looked after child	
Have educational problems	
Have experienced physical or sexual abuse in childhood	
Have experience of domestic abuse	
Be involved with crime	
Have poor housing	
Have low self esteem	

Table 1

Antenatal care

Pregnant teenagers should be offered the standard antenatal care package as recommended by the National Institute for Health and Clinical Excellence (NICE), Antenatal Care Guideline, 2008 (updated 2016). However, as outlined, teenagers are a vulnerable group and therefore require additional antenatal care. A multidisciplinary approach is essential, ideally including

- Specialist midwifery input
- Obstetrician
- Safeguarding team
- Fathers' worker
- Social care (often including housing, education services and mental health services)

The additional measures undertaken during antenatal visits for the pregnant teenager are discussed in more detail below. There must be a commitment to understanding the importance of safeguarding, encouraging continuing education, discussing sex in the context of relationships, introducing discussion about contraception as early as possible in antenatal care, making the care inclusive for the father of the child, and making the service young person friendly. In select cases, legal and paediatric involvement will also be required.

Until recently many areas of the UK offered a large proportion of pregnant teenagers referral to the Family Nurse Partnership (FNP). The FNP programme is a licenced preventative programme which aims to improve outcomes for young (age less than 20) first time mothers and their children. It was first introduced in the US approximately 30 years ago and robust studies in the US demonstrated improvements in smoking cessation rates during pregnancy, antenatal attendance, breastfeeding rates, self esteem and rates of return to education or employment. Once the pregnant teenager is enrolled in the programme, a specially trained family nurse visits her regularly from early pregnancy until the baby is 2 years old. This enables the family nurse to build a close, supportive relationship with the family and attrition rates are low. At present around 11,000 families in England are benefiting from the support of family nurses with a similar programme running in Scotland. However, recent work has suggested that the programme may not offer value for money and in a cash-strapped NHS some areas are considering whether to continue commissioning the service.

Please cite this article in press as: Whitworth M, et al., Antenatal management of teenage pregnancy, Obstetrics, Gynaecology and Reproductive Medicine (2016), http://dx.doi.org/10.1016/j.ogrm.2016.11.005