A decade later: follow-up review of South African research on the consequences of and contributory factors in teen-aged pregnancy

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ABSTRACT

In this paper, we review South African research conducted in the last 10 years on the consequences of and contributory factors in teen-aged pregnancy. We discuss research into the rates of teen-aged pregnancy, the intentionality and wantedness of pregnancy, the disruption of schooling, health issues, consequences for the children, welfare concerns, knowledge and use of contraception, timing of sexual debut, age of partner, coercive sexual relations, cultural factors and health service provision. We compare this discussion to the reviews on the same topic appearing in the South African Journal of Psychology a decade ago. We find that there are several changes in focus in the research on pregnancy amongst young women. We conclude that, in general, there has been an improvement in the breadth of data available, mostly as a result of representative national and local surveys. A better teasing
out of nuances around particular issues and a grappling with theoretical issues are also evident in recent research.

Key words: adolescents; pregnancy; teenage pregnancy
INTRODUCTION

A decade ago, Macleod (1999a, 1999b) presented a comprehensive review of South African research on the consequences of teen-aged pregnancy and its ‘causes’. Now we return to research on these issues, highlighting changes in approach and new issues that have emerged in the literature in the last 10 years.

We include in this review research on current rates of teen-aged pregnancy and termination of pregnancy (TOP), and questions of the intentionality and wantedness of pregnancy, which were absent in Macleod (1999a, 1999b). Following on from this we discuss research on the outcomes of early reproduction, including the disruption of schooling, health issues, consequences for the children and welfare concerns. We explore research on factors that may contribute to teen-aged pregnancy, such as knowledge and use of contraception, timing of sexual debut, age of partner, risky sexual behaviour, coercive sexual relations, cultural factors and health service provision. We conclude by drawing attention to the major shifts in research in this area. We have excluded research that does not speak directly to the consequences and causes of teen-aged pregnancy (for example, we excluded reference to several publications by Macleod and colleagues in which teen-aged pregnancy is viewed through the lens of post-structural feminism), as well as research contained within unpublished theses. We included peer review published research, national surveys, and input to the Human Sciences Research Council’s round table on teenage pregnancy.

The information contained in this paper was collected from a range of search engines, including the Index of South African Periodicals (ISAP), South African ePublications, South African Bibliographic Network (SABINet), Academic Search Premier, SocIndex with Full Text, PsycINFO, Health Source: Nursing/Academic Edition, and Educational Resource Information Centre (ERIC).

RATES OF PREGNANCY

National statistics paint an interesting picture that negates the popular opinion that rates of teen-aged pregnancy and childbearing are burgeoning. The 1998 South African Demographic and Health Survey (SADHS) (Department of Health, 2002) indicated that 35% of women had had a child by the age of 19 years, while in the 2003 SADHS survey (Department of Health, 2007) this had decreased to 27%. However, the SADHS 2003 questions the validity of its fertility data. Nevertheless, Moultrie and McGrath (2007) argue that teenage fertility fell by
10% between the 1996 and 2001 censuses. The current age-specific fertility rate (defined as the number of births in a certain year per thousand to women in a specific reproductive age group) for 15-19 year-old women is estimated at 66/1000 (Makiwane & Udjo, 2006). In a nationally representative household survey, Pettifor et al. (2005) found that 15.5% of 15-19 year-old women reported having ever been pregnant (including pregnancies resulting in abortion, miscarriage and birth).

Some localised data also points to a decline in fertility rates. Moultrie and McGrath (2007) report that, in the Demographic Surveillance Site in rural KwaZulu-Natal, teenage fertility rates fell from just over 100 births per 1000 teen-aged women in 1995, to 88/1000 and 73/ per 1000 respectively in 2001 and 2005.

According to the 2003 SADHS, pregnancy rates decrease with increasing education. Thus, in this survey, 20% of 15-19 year-old women with a Grade 6 to 7 education, and only 7% with a higher education, reported having ever been pregnant.

The rate of teenage fertility is lower in South Africa than the overall rate in sub-Saharan Africa. It is comparable to many middle-income countries, but higher than most European countries. A sociological difference between teenage fertility in South Africa and other sub-Saharan countries, however, is that in South Africa child-birth to teen-aged women tends to take place outside of marriage (Makiwane & Udjo, 2006).

**INTENTIONALITY AND WANTEDNESS OF PREGNANCY**

Some research has pointed to the fact that a small minority of young women plan their pregnancies. In the surveys conducted by Manzini (2001), Garenne, Tollman, Kahn, Collins & Ngwenya (2001), the Planned Parenthood Association of South Africa (PPASA) (2003), and Pettifor et al. (2005), 29%, 24.6%, 9.2% and 33% of respondents respectively planned their pregnancies. For the rest, pregnancy was unintended.

Unintended is not, however, the same as unwanted. In the 2003 SADHS, distinction is made between ‘wanted then’ (at time of conception), ‘wanted later’ and ‘wanted no more’, as seen in Table 1.

<Insert Table 1 here>
Thus, it appears that although a smaller percentage of teen-aged women plan their pregnancy than older women, for a substantial percentage (42.6%) the pregnancy is unintended but not unwanted.

Conceptualising and defining unplanned, unintended and unwanted pregnancies can be complex. A relatively reliable indicator of the unwantedness of a pregnancy (for whatever reason) is termination of pregnancy (TOP). Buchmann, Mensah and Pillay (2002) found the following age-related TOP rates at a hospital in Soweto, as measured over an eight-week period:

- 13 to 16 years: 23%
- 17 to 19 years: 14.9%
- 20 to 34 years: 12.7%
- 35+ years: 16.2%.

According to these statistics, more young teen-aged women have unwanted pregnancies than do older women. Low rates of termination of pregnancy (3%) were reported in the national household survey (Pettifor et al., 2005). This low level of reportage may, however, have to do with the stigma attached to termination of pregnancy.

**POTENTIAL CONSEQUENCES**

**The disruption of schooling**

The relationship between early pregnancy and school disruption is complicated. Data presented in Macleod (1999a) indicated that many young women who became mothers in fact left school before pregnancy. More recently, 20.6% of the pregnant teenagers in the survey conducted by Manzini (2001) in KwaZulu-Natal had left school prior to conceiving. The 2003 General Household Survey statistics indicate that of all the females who had dropped out of school, only 13% cited pregnancy as a reason (Crouch, 2005). Nevertheless, this is higher than the 10.3% in the household survey conducted amongst urban black youth by Richter (1996), prior to the introduction of the Schools Act, which prevents discrimination against pregnant learners. For those who leave because of pregnancy, a significant new factor may be the Department of Education’s (2007) guidelines entitled ‘Measures for the Prevention and Management of Learner Pregnancy’ that makes it possible for educators to ‘request’ that learners take a leave of absence of up to two years.
There are thus numerous factors, besides pregnancy, that lead to school leaving. Some of the major reasons for leaving school before the end of Grade 12 include poverty, frustration associated with the inexperience of teachers, a lack of relevance of the curriculum and teaching materials, the absence of parents at home, and the need to care for siblings or sick family members (Human Sciences Research Council, 2007).

Biddecom and Bakilana’s (2003) investigation of the transition to adulthood through significant events in young people’s lives (first sex, stopping school, pregnancy, birth and union) provides a glimpse into the complexity of the sequencing of these events. The researchers conclude that adolescents seldom experience all five events during their teenage years, and that there is “more disorder than order in terms of the variety of combinations and chronological sequences of important social and family formation transitions” (p. 15).

Studies reviewed in Macleod (1999a) indicated that a substantial minority of pregnant or mothering young women did not plan to return to school. More recent evidence gives a better picture of actual returns (as opposed to plans to return). Manzini (2001) found that 48% of young women who left school because of pregnancy returned to school. The major reason cited for not returning to school was the need to care for the child. In the survey by Grant and Hallman (2006) 29% of the 14-19 year-old women and 52% of the 20-24 year-old women who had dropped out of school had returned. With every year that passes the chance of a return to school diminishes, with very little chance of return after four years (Grant & Hallman, 2006).

Various reasons for drop-out and return have been explored. Lloyd (2005) ascribes the drop-out rates to the child support grants (see later discussion of the controversy regarding this). Grant and Hallman (2006) found that prior poor school performance (e.g. non-pregnancy-related repetition of grades) and having to be the primary caregiver for the child are strongly associated with the likelihood of dropping out when pregnant. In terms of returning to school, Kaufman, De Wet and Stadler (2000) suggest that the increased bride price that accompanies higher educational status is a motivating factor for parental support in this regard. Grant and Hallman’s (2006) data suggest that young women are more likely to return to school if they have never repeated a grade or withdrawn temporarily from school before, and if they live with an adult female. The presence of older female relatives allows a young mother to relinquish domestic duties to older women and return to school. Young women who marry and move to their husband’s household may, however, have increased domestic responsibilities and there may be less support for their continued education (Matthews, et al., 2008).
Grant and Hallman’s (2006) study debunks the frequently made assumption that, were young women not to conceive, they would continue their education. They discuss the concept of disengagement from school in which young women perceive few opportunities emerging from participating in education. If there is little incentive to participate in school, there is also little incentive to avoid pregnancy. For some young women it is a rational option to leave an unsatisfactory situation at school for the role of motherhood.

It is possible, however, that not only school engagement but also school attendance is a protective factor against teen pregnancy. Harrison (2008) argues that school leaving, either through dropout or completion, represents a significant change in the life circumstances of young women. This is supported by statistics that indicate that there is an increase in pregnancy and HIV infection after school leaving, with the proportion of 17-18 year-olds who have been pregnant being nearly four times that of 16-year-olds.

**Early reproduction and health**

The studies cited in Macleod (1999a) that had a health focus tried to tease out the obstetric outcomes of early pregnancy. Some of these studies showed increased risks, while others ascribed the risk to socio-economic status or poor antenatal care. We failed to locate any recent South African research on the obstetric outcomes of early pregnancy. Instead the focus has shifted to concerns over the increased risk for young women in terms of contracting HIV (Jewkes, Vundule, Maforah & Jordaan, 2001) and the level of antenatal care young pregnant women receive.

According to the 2003 SADHS, compared to pregnant women 20 to 34 years old, pregnant women under the age of 20 are more likely to receive care from a nurse or midwife than from a doctor and are more likely not to receive care at all. The components of antenatal care also reflect less adequate antenatal care for younger women compared to women in the age category of 20 to 34 years. They are less likely to be informed of the signs of pregnancy complications, to have their weight, height and blood pressure measured, to have urine and blood samples taken or to receive iron supplements.

Many young women report for antenatal testing only in their second or third trimester. This should be seen in the light of the finding that late presentation for pregnancy care is a general and persistent problem in South Africa (Myer & Harrison, 2003). In addition, taboos associated with teenage sexual activity, denial of paternity by a male partner and lack of
knowledge regarding the importance of antenatal consultations may be reasons for late attendance (Phafoli, Van Aswegen & Alberts, 2007).

Women who have accessed urine pregnancy testing tend to seek care up to four weeks earlier than those who have not. Barriers to young women accessing urine pregnancy testing within the public health sector include ignorance of protocols on the part of service providers and a negative attitude to providing pregnancy tests for teenagers on the basis that this encourages them to be sexually active (Morroni & Moodley, 2006).

The outcomes of early reproduction for children

Research reviewed in Macleod (1999a) pointed to inadequate mothering, neglect, maltreatment and abuse as consequences of early childbearing. The concern about whether these effects were owing to the age of the mother or constraints imposed by poverty were raised. Interestingly, we were not able to locate any recent research that spoke to the issue of mothering or neglect/abuse.

Data, albeit contradictory (see below), is, however, available on mortality rates. The 2003 SADHS is inconsistent in terms of its reportage of mortality rates by age of mother. Table 2 below contains figures featured in Table 6.3 of the 2003 SADHS. (Neonatal mortality is the probability of dying within the first month of life; post-neonatal mortality is the difference between infant and neonatal mortality; infant mortality is the probability of dying in the first year of life; child mortality is the probability of dying between exact age one and five; under-five mortality is the probability of dying between birth and exact age five).

Data in the table indicate that, on all indices, children born to mothers below the age of 20 have a lower mortality rate than those born to women between the ages of 20 and 39 years. However, the text below this table in the 2003 SADHS states that, “The relationship between maternal age and child mortality shows the expected U-shape with women younger than 20 years having higher infant and under-five mortality rates than women between 20 and 40 years of age.” This appears to be in direct contradiction to the figures presented. It is not clear which of these (the figures or the statement) is accurate. The conditions that most frequently account for infant deaths are complications in the perinatal period (22%) and low birth weight.
Although it is possible that these conditions are more pronounced for young women who give birth, further clarification of the above contradictory data is required.

**Welfare concerns – the child support grant**

Macleod (1999a) reported that concerns around welfare dependency were a feature of the Euro-American, but not the South African, literature on teen-aged pregnancy. This is no longer true. With the introduction of the child support grant (CSG), research on the possibility of the CSG acting as a ‘perverse incentive’ has been conducted.

The popular concern, as raised in the South African media, that young women are deliberately conceiving in order to access the CSG is supported, to a certain extent, by the PPASA (2003) survey in which it was found that 12.1% of pregnant teen-aged women who had deliberately conceived cited the CSG as the reason. However, other research (Department of Social Development, 2006; Makiwane & Udjo, 2006) concludes that there is no evidence that the CSG leads to a ‘perverse incentive’ to conceive. These authors base their conclusion on the following: (1) early fertility decreased after the introduction of the CSG; (2) only 20% of teen-aged mothers are beneficiaries of these grants; (3) older female relatives who take over care of the child are often beneficiaries rather than the teen-aged mothers; (4) of those who would qualify for the grant, the proportion of teen-aged mothers taking them up is considerably lower than those in older age groups; and (5) during the period in which the CSG has been offered, rates of termination of pregnancy have increased.

Indeed, the fact that many young women who are eligible for the grant are not receiving it should be of concern. In general, the CSG is associated with an increase in school attendance, and improved child health and nutrition, which in turn contributes to school-readiness of the child, as well as extra money to pay for school fees and uniforms (Case, Hosegood & Lund, 2005).

The concern about the social cost of early reproduction through teen-aged mothers depending on welfare has also been criticised within the United States. Researchers compared teen-aged mothers with teenagers who were pregnant but had a miscarriage (i.e. who would have been mothers had the miscarriage not occurred). Their conclusions are startling, given the usual assumption in the United States that early reproduction contributes to welfare dependency. They state that if all teenagers delayed childbearing, public assistance expenditure would increase slightly and that the lifetime earnings of these women would decrease (Hotz, McElroy & Sander, 1996).
CONTRIBUTING FACTORS

While not all pregnancies amongst young women are unplanned, and not all unplanned pregnancies are unwanted, more young women find their pregnancies problematic than do women in their middle reproductive years. It is these young women specifically who should be assisted in terms of preventing unwanted pregnancies. An understanding of the contributory factors (which are complex and interweaving) is required for this to occur.

Knowledge and sources of knowledge

Within the context of HIV, much emphasis has been placed on education about condom usage. James, Reddy, Taylor and Jinabhai (2004) found that secondary school learners in the Midlands district of KwaZulu-Natal had a high level of knowledge regarding the causes of and protection against HIV/AIDS and STIs. In studies more directly related to contraception (e.g. Oni, Prinsloo, Nortje, & Joubert, 2005; Richter & Mlambo, 2005), young people’s knowledge has been found to be variable, with some misconceptions abounding. For example, in Rutenberg et al.'s (2001) household survey in KwaZulu-Natal, few respondents (8%) knew about the menstrual cycle and the times a woman has the greatest chance of falling pregnant. This knowledge improved slightly with age. However, 80% of their sample knew that a woman could get pregnant if she had sex only once, almost all (99%) knew of at least one method of family planning, and 72% could name more than two. White respondents, urban African respondents and female respondents were more likely to know of more than one method than other respondents.

Research on young people’s knowledge of emergency contraception is new. Indications are that this knowledge is quite poor. Mqhayi et al. (2004) found that only 17% of the young women they interviewed at urban and rural public health clinics had heard of emergency contraception, with significantly more urban-based women knowing of its existence than rurally-based women. These trends seem to mirror the knowledge of this kind of contraception in the general population (Smit et al., 2001).

Macleod (1999b) noted that:
There are a number of difficulties associated with the research which investigates the reproductive ignorance hypothesis. Firstly, the implied one-to-one correspondence between reproductive ignorance and teenage pregnancy is spurious. Obviously, a lack of sexual knowledge is not a sufficient condition for conception, nor is it even necessary (p. 8).

This is now recognised by researchers. For example, Ehlers’ (2003a) survey suggests that young women in Tshwane know about contraceptives, but that this knowledge is not necessarily associated with effective usage. 45.9% of the sample of pregnant young women knew of contraceptive methods but had still conceived. Abel and Fitzgerald (2006) argue that a rational, decision-making model regarding contraceptive usage, that equates knowledge with usage, ignores contextual issues which may prevent young women, especially, from negotiating condom usage.

Young men and women are exposed to messages regarding sexuality and contraception from a variety of sources. These include elders, peers, the mass media, and formal, institutional sources such as life skills programmes and family planning services.

Parents are enjoined by a variety of sources to speak openly to their children about sexuality and to provide sex education. However, this may be an unrealistic expectation. Similar to the research reviewed in Macleod (1999b), recent research indicates that it is generally difficult for parents to engage in this kind of interaction with their children (Madu, Kropiuunigg & Weckenmann, 2002). Despite these barriers, a number of interventions, such as the PPASA’s parent education programmes and loveLife’s Born Free dialogues, are aimed at parents to sensitise them to the need to speak with their children about sexual matters.

What is becoming clear in the literature are the nuances of interaction between parents or elders and young women. MacPhail and Campbell’s (2001) research shows that while older women provide little or no information to young women, they will assist in taking a young woman to the family planning clinic. Although some young women are informed of a link between menstruation and pregnancy, their understanding of the nature of the association remains vague. Most often young women are admonished to stay away from boys, meaning that abstinence rather than contraception is emphasised. Adult surveillance may also actively impinge on contraceptive use. Information about youths’ visits to family planning clinics, and about their suspected relationships and sexual activities is passed on to relevant others, who in turn reprimand the youth in question.
As with research reported in Macleod (1999b), peers are found in recent research to be a frequent source of information (Rutenberg et al., 2001). Again, however, peer communication is viewed as a double-edged sword. While some of their messages provide valuable information, some perpetuate the mystification and silence surrounding sexual matters.

In contrast to research reviewed in Macleod (1999b), research in the last decade has concentrated more on the mass media, including magazines and radio and television broadcasts. This must be viewed in the light of recent efforts such as the sexual health campaign run by loveLife. Research indicates that these media have reasonable reach – about half the population (Rutenberg et al., 2001) – although reception may be gendered, with more males than females being exposed to the messages (Oni et al., 2005). Exposure to messages in the mass media has been positively associated with increased condom usage (Katz, 2006).

Formal, institutional sources of knowledge, where operational, appear also to be effective in terms of imparting knowledge. For example, life skills education in schools has been shown to be of some benefit in terms of promoting sexual and reproductive health knowledge and perceived condom self-efficacy (Magnani et al., 2005). Nevertheless, there is still some way to go, and implementation appears to be uneven. For example, teenagers in Bushbuckridge, Limpopo, stated that they had not received school education that enabled them to understand sexual intercourse, sexually transmitted diseases, contraception, negotiation of sexual relationships, and the difficulties of single parenthood (Richter & Mlambo, 2005).

**Use of contraceptives**

It appears that some inroads are being made in terms of contraception use amongst teenagers. Moultrie and McGrath (2007) report from the Demographic Surveillance Site in rural KwaZulu-Natal that between 2000 and 2005 the proportion of young people who had ever had sex remained relatively constant, but that contraceptive usage increased significantly. Simbayi, Chauveau and Shisana (2004) report a similar trend of increased contraceptive usage in their national survey as compared to findings from the 1990s. Dinkelman, Lam and Leibbrandt (2007) found a significant increase in condom usage and a decrease in multiple partners between 2002 and 2005 amongst women aged 17 to 22 years surveyed in the Cape Area Panel Study.
Although contraception usage appears to be increasing, this varies considerably depending on a number of factors, including location and education. According to the 2003 SADHS, women in rural areas and in the Eastern Cape and Mpumalanga, and those with lower levels of education, reported the lowest condom use. These trends are confirmed by Mqhayi et al.’s (2004) comparative study of rural and urban public health facility users, and by Kaufman, Clark, Manzini and May’s (2004) survey in KwaZulu-Natal.

Factors that prevent the use of contraceptives that were reported in recent research are similar to those listed in Macleod (1999b). These include perceived lack of risk, peer norms, gender power relations (MacPhail & Campbell, 2001), lack of availability and access, fear of adult attitudes to contraceptive usage, and the economic context of adolescent sexuality (Ehlers, 2003a).

Research is beginning to tease out the nuances regarding contraceptive usage. For example, using condoms at sexual debut and speaking to partners about condoms have been reported as indicators of condom use at the respondents’ most recent sexual interaction (Hendriksen, Pettifor, Lee, Coates & Rees, 2007), with one survey finding that younger respondents were less likely to speak to their partners than older ones (Manzini, 2001). Garenne et al.’s (2001) research in the Agincourt subdistrict of Limpopo Province shows that contraceptive usage increases significantly amongst young women after first birth. Data from the SADHS shows that youth are currently more willing to use contraceptives prior to first birth than previous cohorts of women.

As indicated above, research on emergency contraceptives is new. In the study by Mqhayi et al. (2004) only two out of 193 women had used emergency contraception, although 39% reported having had unprotected sex in the last year although they did not wish to conceive.

Timing of first sexual intercourse and age of sexual partner

The average age of sexual debut reported in recent research is somewhat older than that reported in Macleod (1999b), where the average reported age at first coitus was around 14 years. In the 2003 SADHS, the median age of first intercourse is reported consistently across all age groups to be around 18 years, in Pettifor et al.’s (2005) nationally representative survey it is around 17 years, and in Simbayi, Chauveau and Shisana’s (2004) nationally representative survey, 16.5 years. In the 1998 SADHS survey 46% of women reported that their first sexual encounter occurred before the age of 18. This percentage dropped to 42% in
the 2003 SADHS survey, indicating a possible general trend in delaying first intercourse. Despite this, early sexual debut is a feature for a sizable minority of young teenagers.

Factors affecting sexual debut, including education, provincial location, race, and orphan status, are elucidated more clearly in recent research than in that reported in Macleod (1999b). According to the 2003 SADHS, there is a difference of one to three years in age at first sex between the lowest and highest education groups. The provinces reporting the lowest age of sexual debut are the Eastern Cape and Mpumalanga. The percentage of reported first sex by age 15 was lower among whites, Indians and coloureds than among Africans. Urban versus non-urban location did not make any difference. In a separate study, it was found that orphaned teenagers had an earlier sexual debut than non-orphans (Thurman, Brown, Richter, Maharaj & Magnani, 2006).

The age difference between partners and the possibility of transactional sex has gained more attention in recent research than was reported in Macleod (1999b). Jewkes, Vundule, Maforah and Jordaan (2001) report a mean difference of 5.1 years in age between pregnant young women and their current partners in their sample of young women in Cape Town. This differed significantly from a comparison group of young women who were not pregnant, where the mean difference in age between partners was 4 years. Dunkle et al. (2007) report that 17.7% of male participants in their study aged 15 to 26 admitted to engaging in transactional sex, and that a male partner was more likely to perpetrate gender-based violence within the context of a transactional sexual relationship.

Factors affecting contraceptive use and risky sexual behaviour

Macleod (1999b) reported that:

The South African research on risk-taking behaviour is mostly descriptive in nature. Researchers in the United States have extended this to investigating the factors associated with risk-taking behaviour and to developing cognitively based theoretical models which may account for this behaviour in certain adolescents (p. 10).

This has changed in the last 10 years with researchers analysing and theorising factors associated with sexual risk taking. This is possibly owing to the increased research into young people’s sexual behaviour in the light of the HIV epidemic.

Brook, Morojele, Zhang and Brook (2006) researched the multiple pathways to risky sexual behaviour amongst young people through studying the relationship between what they call the proximal factors (personality, emotional status and behavioural tendencies),
intermediate factors (parent-teenager relationship, peer influence) and distal factors (socio-economic conditions). Their conclusion is complex, but illustrates the important role that poverty plays in sexual behaviour:

The first pathway showed that poverty is related to a weak parent-child relationship, which in turn is related to vulnerable personality and behavioral attributes. Vulnerable personality and behavioural attributes are then observed to be related to associating with deviant peers, which in turn is related to risky sexual behaviour. The second pathway demonstrated that poverty is related to associating with deviant peers, which in turn is linked to vulnerable personality and behavioral attributes and risky sexual behaviour. A reciprocal relationship was observed between associating with deviant peers and having vulnerable personality and behavioural attributes. The third and fourth pathways show that family poverty and deviant peers are directly associated with risky sexual behaviours. ... There was no direct link between personality and behavioral risk factors and risky sexual behavior, but we found that this relationship … was mediated by associating with deviant peers (p. 270).

Researchers have used a range of social cognitive theories to explain sexual risk behaviour at a personal and interpersonal level amongst young people. For example, Jemmott et al. (2007) found that adolescents who had positive attitudes to condoms and positive behavioural control beliefs (i.e. believed they could use condoms effectively) had firmer intentions to use condoms than their peers. Bryan, Kagee and Broaddus (2006) found HIV knowledge and positive outlook (self-esteem and future optimism) to be associated with the intention to use condoms. The theory of planned behaviour holds that the intention to use condoms is the main determinant of actual use, an assertion that is supported by the research of Bryan, Kagee and Broaddus (2006).

Boer and Mashamba (2007) found a gender difference in the psychosocial correlates of intention to use condoms. Among the males in their sample, attitude to condoms and subjective norms (perception of the normative beliefs of significant others and motivation to comply with these norms) were associated with intended condom use, while for females attitude to condom and self-efficacy were related to intended condom use. They relate this difference to the gender power imbalances prevalent in many young people’s lives, which means that young women need to have high levels of self-efficacy in order to negotiate
condom use within a sexual relationship. Similarly, Sayles et al. (2006) found that respondents with high self-efficacy engaged in fewer sexual risk behaviours. Perception of risk has been argued to play a role in sexual behaviour. It appears that the threat of contracting HIV is currently a significant factor in motivating young people to use condoms (Varga, 2000). Despite this, the calculation of costs versus benefits may sway young people towards non-use of condoms. For some youth, decreased physical pleasure and fears of physical consequences (e.g. condom getting stuck in the womb) mitigates against consistent usage of condoms (James et al., 2004; Varga, 2000).

Beliefs concerning what using a condom means are also a factor. Young women’s carrying of condoms or insistence on their use during sex may be seen as a sign of promiscuity, infidelity, or HIV infection. This negativity does not extend to males (Varga, 2000). Harrison, Xaba and Kunene (2001) suggest that male youths understand condoms as something to be used within a casual relationship, while female youths see them as a signal of love and trustworthiness. Varga (2000), however, notes an overarching perception that condoms threaten trust and intimacy between partners.

At an interpersonal level, messages from significant others and the ability of young people to negotiate with their partners about contraception have come under the spotlight. Boer and Westhoff (2006) indicate that communication concerning condoms is evident from both strong ties and weak ties within young people’s social networks. However, the level of positivity varied widely, with the most positive messages coming from teachers, mothers, and close friends, and negative messages coming from teachers propagating abstinence and from close friends. Their research indicates that young people tend to conform to messages (either positive or negative) if these messages are provided by strong social ties, but not if they are provided by weak social ties.

**Violent and coercive sexual relationships**

Dunkle et al. (2004) found in their sample of women attending antenatal clinics in Soweto that over half of the women aged 15 to 30 had experienced physical and/or sexual violence from male intimate partners, with nearly one-third reporting incidences in the previous 12 months. Another survey, conducted by the PPASA in six provinces, found that 20% of teen-aged females reported forced sexual encounters or had been sexually assaulted.

While the research on violent and coercive sexual relations appeared in the review by Macleod (1999b), more is now understood concerning its relation to early sexual debut and
early pregnancy. For example, Dunkle et al. (2004) found that the median age of first intercourse amongst their participants was 17 years. However, 97% of women who reported first intercourse before 13 years, and 26.7% of those reporting at the ages of 13 and 14 years also reported non-consent to coitus. Data confirming forced or coerced sexual debut is provided by Rutenberg et al. (2001) and Jewkes and Abrahams (2002).

Jewkes et al. (2001) found that the partners of pregnant young women in their sample were more likely to be older, to not be in school and to have multiple girlfriends than the partners of non-pregnant young women. The pregnant women experienced significantly more violence in their relationships and were more likely to have been forced to have sex for the first time.

Similar to research reported in Macleod (1999b), the gender dynamics underpinning coercive sex have received attention in recent research. Varga (2000) contends that gender ideology enforces double standards in behaviour and inhibits the ability of young women to negotiate with a partner. Constructions of masculinity in part rely on sexual performance, particularly the construction of *isoka*, a dominant and sexually vigorous version of masculinity. However, the threat of HIV seems to have diminished this norm, with young men reporting being more cautious than in previous studies. Jewkes and Christofides (2008) suggest that paternity is so important to masculinity, that some young men might actively seek an opportunity to father a child.

**Cultural factors**

Macleod (1999b) reported that the exploration of cultural factors in relation to teen-aged pregnancy fell into two broad camps – the breakdown of tradition and the cultural value placed on fertility. The first of these has received less attention in the last 10 years. The practice of vaginal inspection, which was reported as one of the traditional practices that was being broken down, has, however, been debated. Recent initiatives have attempted to use this rite to promote abstinence from sexual intercourse and as a means of avoiding STIs and pregnancy. Maluleke (2003) argues that while there is reason to believe that the rite can be used to pass on valuable information regarding reproductive health to young women, it is a gendered cultural institution. The procedure is seen as demeaning to the women who are tested, and as a violation of personal privacy. There are also possible unintended outcomes, including older men seeking out younger women because of their potential virginity and low HIV risk status (Simbayi, Chauveau & Shisana, 2004).
The cultural value placed on fertility has received less attention, although Preston-Whyte (1999) and Jewkes and Christofides (2008) discuss the issue. They indicate that women of all ages in most African societies experience pressure to have children. Importance is placed on fertility and procreation, such that young women may be labelled as barren if they do not conceive. Pregnancy is understood as the epitome of womanhood. Childbirth may be regarded as a rite of passage, and thus raises the status of a young woman. Furthermore, pregnancy is valued by young African women for the meaning it imparts to relationships. In the context of multiple relationships, an acknowledged pregnancy may strengthen bonds between partners.

Health service provision

Macleod (1999b) reported on research which found that access to service provision was difficult for young people. There seems to be some change in this, although there are still difficulties. The majority of participants in MacPhail and Campbell’s (2001) research reported obtaining their condoms from the local clinic. In a national sample of adolescent mothers (Ehlers, 2003b), the majority reported waiting only 30 minutes to receive assistance at a family planning clinic, and 86% experienced nurses as being very helpful.

The Department of Health’s National Adolescent Friendly Clinic Initiative (NAFCI) was begun in 1999 and works with service providers to improve the quality of health care for young people. Research has identified changes in the perceptions of youth when a clinic has received NAFCI support (Dickson, Ashton & Smith, 2007). However, this is not universal and access to condoms is especially difficult for young women who have to negotiate the negative attitudes of nurses at some local clinics (MacPhail & Campbell, 2001).

CONCLUSION

A number of shifts in focus with regards to research on the consequences and contributory factors of teen-aged pregnancy are evident in this review. Researchers no longer pontificate about the obstetric outcomes of teen-aged pregnancy, but rather concentrate on the services that are provided to young women. The mothering capabilities of young women do not feature as a research question, although (contradictory) data on infant and child mortality rates are available. Relationship difficulties with family of origin and partner, which were reported on in Macleod (1999a) are no longer really an issue. Demographic concerns have
disappeared from the radar screen, but welfare concerns have emerged with the introduction of the CSG. Disruption of schooling remains a topic of debate with respect to the outcomes of early pregnancy. Reproductive knowledge, the source of knowledge, sexual debut and the use of contraceptives remain as central points of focus. Researchers seem to have lost interest in expounding early menarche, psychological problems, family structure, and peer influence as contributory factors, all factors that featured in the research reported in Macleod (1999b). Coercive sex and cultural issues remain of interest to researchers, although more nuance is evident in the former and less in the latter. The level of health service provision, as a contributory factor, continues to be an important area of focus.

In general, we feel that the quality, depth and breadth of the research have improved over the last ten years. This is as a result of (1) the nationally representative as well as localised health surveys being conducted, (2) researchers’ teasing out of the nuances surrounding particular issues (such as school return; CSG; interactions between young people and elders around sexual issues, condom usage, and coercive sex) and (3) increased levels of theorising around particular issues. The data that we have access to and the engagement of researchers with the complexities of issues arguably provides a much better basis for thinking through, planning and implementing interventions.
REFERENCES

Abel, G., & Fitzgerald, L. (2006). ‘When you come to it you feel like a dork asking a guy to put a condom on’: is sex education addressing young people’s understandings of risk? *Sex Education*, 6(2), 105-119.


Table 1: Fertility planning status

<table>
<thead>
<tr>
<th></th>
<th>Wanted then</th>
<th>Wanted later</th>
<th>Wanted no more</th>
<th>Missing</th>
<th>Total</th>
</tr>
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<tr>
<td>&lt; 20</td>
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<td>42.6</td>
<td>34.4</td>
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</tr>
<tr>
<td>Total across age range</td>
<td>50</td>
<td>24.1</td>
<td>23.2</td>
<td>2.7</td>
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</tbody>
</table>

*Source: 2003 SADHS*
Table 2: Neonatal, postnatal, infant, child and under-five mortality rates by age of mother

<table>
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<tr>
<th>Mother's age at birth</th>
<th>Neonatal mortality</th>
<th>Postnatal mortality</th>
<th>Infant mortality</th>
<th>Child mortality</th>
<th>Under-five mortality</th>
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</thead>
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<td>31</td>
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<td>10</td>
<td>48</td>
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<td>26</td>
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<td>14</td>
<td>65</td>
</tr>
</tbody>
</table>

*Source: 2003 SADHS*