Chapter 9

Sexual and Reproductive Health

Key points

- On average, New Zealand girls have their first menstruation (menarche) when they reach 149 cm in height and just under 13 years of age.
- Studies suggest that by the time they reach 15 years of age, about 10–30 percent of New Zealand young people have had sexual intercourse.
- Early sexual intercourse appears to be associated with:
  - being female
  - being Māori
  - a background of socioeconomic disadvantage
  - sexual abuse in childhood
  - alcohol misuse in early adolescence.
- Most sexually active young people use contraception on at least some of the occasions they have sex. Condoms are the main form of contraception they use.
- Younger teenagers and Māori teenagers are less likely than older teenagers and non-Māori teenagers to use contraception.
- Compared to other occasions, teenagers are less likely to use contraception on the first occasion they have sex.
- Each year about three in every 10,000 girls aged less than 15 years gets pregnant and has a child. About three in every 10,000 girls aged less than 15 years gets pregnant and has an induced abortion.
- While the incidence of sexually transmitted diseases is low for children under 15 years old, these diseases are more likely to have serious long-term consequences for teenagers than for adults.

Introduction

A certain amount of sexual exploration is normal for young people, although sexual intercourse as part of this exploration can lead to various undesirable outcomes including unintended pregnancy and sexually transmitted diseases (STDs) (Ministry of Health 1997a, 1997b).

While considerable research has been conducted in New Zealand on the reproductive and sexual health of older adolescents, reliable up-to-date information on 0–14-year-olds is relatively scarce (Maskill 1991). This is particularly the case for Māori and Pacific children.

Physical development

Puberty is the time when young people develop their reproductive capacity. Puberty normally begins for females between the ages of nine and 14 years. For males it is a little later, between the ages of 11 and 16 years (Maskill 1991).

Puberty is normally associated with a rapid growth in body weight and height. In the Dunedin Multidisciplinary Health and Development Study, the mean weight of girls at the time they had their first menstrual periods (menarche) was 41 kg. Their mean height was 149 cm and their mean age was 12.9 years (St. George et al 1994). Height was found to be the most reliable predictor of when a girl could expect to have her first period.

Psychosocial development

As well as experiencing various physical changes to their bodies, during puberty young people start to think about and in some cases form sexual relationships (Bennett 1984).

Prevalence

Sexual intercourse before 16 years of age

There is evidence that a sizeable minority of New Zealand teenagers have had sexual intercourse before they reach 16 years of age. There are also indications that compared to previous generations, New Zealand women are starting to have intercourse earlier (Health and Disability Analysis Unit 1997).

A 1986 study of 15-year-old girls living in Wellington's Hutt Valley found that 29 percent had experienced sexual intercourse (Lewis 1987). Just under 2 percent of the group had first intercourse at age 12, while 12 percent had first intercourse at age 15. A similar study of 16–19-year-olds attending an urban coeducational high school found that 22 percent of students were sexually active before age 16 (McEwan et al 1988).

When assessed at age 15 in 1992, 8.5 percent of young people in the Christchurch Health and Development Study reported having had sexual intercourse at least once (Lynskey and Fergusson 1993). Girls (10.2 percent) were more likely than boys (6.8 percent) to have had sex. A year later, at age 16, a quarter of the sample reported having had sexual intercourse (Fergusson et al 1994).

Somewhat higher rates of early sexual intercourse were found in a 1992 survey of nearly a 1000 New Zealand high school students aged 12–17 years. Here, 13 percent of 13-year-olds and 40 percent of 16–17-year-old students said they had experienced sexual intercourse (Lungley et al 1993).

In the Dunedin Multidisciplinary Health and Development Study the median age of first sexual intercourse was 16 for women and 17 for men. Overall, 16 percent of the sample reported sexual intercourse before age 15, and 30 percent before 16 years of age. In this study, 70 percent of women who first experienced intercourse before they were 16 said at the 21-year-old assessment that they 'should have waited longer' (Dickson et al 1998).

Frequency of sexual intercourse

Half of the sexually active 15-year-olds in the Christchurch Health and Development Study had sexual intercourse on five occasions or less. Girls were more likely than boys to have had sexual intercourse on several occasions. About half the sexually active 15-year-olds had only ever had one sexual partner (Lynskey and Fergusson 1993).

Similarly, about half the sexually active girls in the Hutt Valley high school study had only ever had one sexual partner. A quarter had more than three sexual partners (Lewis 1987).

Sociodemographic features

In the Christchurch study, Māori and Pacific teenagers, and those from socioeconomically disadvantaged families, were more likely to have sexual intercourse at a younger age than their European and socioeconomically advantaged counterparts (Lynskey and Fergusson 1993). Similar trends were found in a 1995 survey of Northland fourth and fifth form students where the majority of Māori students reported having sex before the age of 14 (Tarrant and Scanlen 1995).

In Lungley et al's 1993 survey of 12–17-year-old high school students, Māori students (48 percent) were more likely than Pacific students (28 percent), European students (24 percent) or students from other ethnic groups (21 percent) to have had sexual intercourse. Students who regularly went to church were less likely to have had sex (22 percent) than students who attended church irregularly or not at all (30 percent) (Lungley et al 1993).

Contraceptive use

In the Christchurch Health and Development Study in 1992, 89 percent of sexually active 15-year-olds reported using contraception at least once (Lynskey and Fergusson 1993). Condoms were by far the most popular contraceptive (used by 82 percent of those who had sex), followed by the contraceptive pill (20 percent). However, it was estimated that, on average, these teenagers did not use any form of contraception about 13 percent of the times they had sex. Two of the teenage girls in the study had been pregnant.

In 1993, when the same cohort was studied at age 16, condoms had become a less popular form of contraception. The pill, by contrast, had increased in popularity (Fergusson et al 1994).

The previously mentioned survey of 1000 high school students found that 68 percent of the sexually experienced students reported normally using some kind of protection against pregnancy or STDs (Lungley et al 1993). Sixty-three percent indicated they had used this protection the last time they had sex. Sexually experienced European students (76 percent) were more likely than sexually experienced Māori students (50 percent) to have used protection the last time they had sex.

Condoms (40 percent) were the most common form of protection used, followed by condoms in combination with the contraceptive pill (16 percent) and the pill alone (11 percent). Thirteen-year-old students were less likely (56 percent) than students aged 16 or more (62 percent) to use condoms the last time they had sex. In addition, European students (70 percent) were more likely than Māori students (43 percent) to use condoms the last time they had sex.

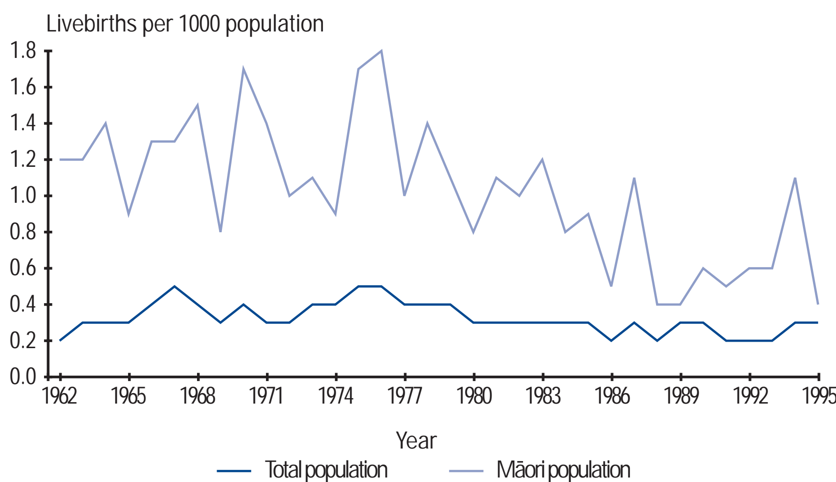
Condoms (76 percent) were also the most common type of contraception used by 15-year-old Hutt Valley high school girls, followed by the pill (48 percent) and withdrawal (39 percent) (Lewis 1987). However, 16 percent of the sexually active girls had never used any form of contraception.

Other New Zealand studies have shown that 30-40 percent of first sexual experiences do not involve any form of contraception. In addition, the younger people are when they first have sex, the less likely they are to use contraception (Maskill 1991).

Fertility

The current birth rate for 10–14-year-old New Zealand girls is approximately three live births per 10,000 females per annum (Statistics New Zealand 1996). The rate is higher for Māori than non-Māori 0–14-year-olds, although the Māori rate has trended downwards in recent years (Figure 9.1).

Figure 9.1: Fertility rates among females aged 10–14 years, 1962–95



Source of data:
Statistics New Zealand 1996.
Note:
Rates are based on small numbers and should be interpreted with caution.

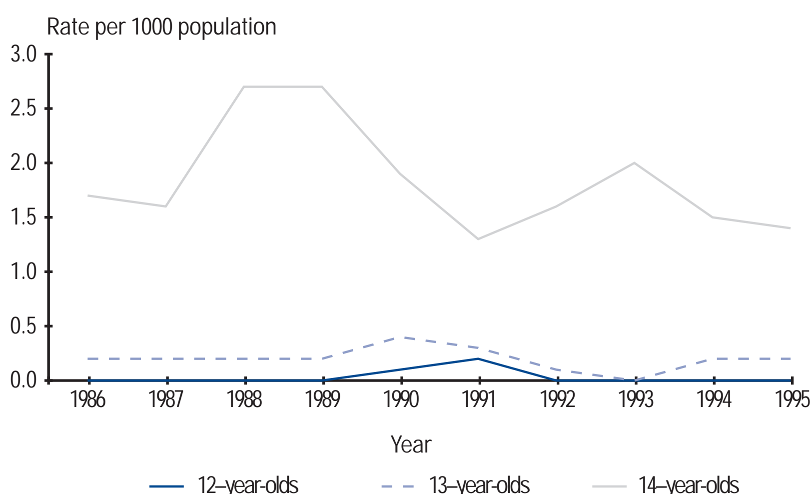
Induced abortions

Compared with women in the other childbearing age groups, in New Zealand induced abortions are relatively rare among 10–14-year-old girls. From 1991 to 1995 there was an average of 44 abortions for girls in this age group per year (Abortion Supervisory Committee 1996). The majority of these abortions were carried out on 14-year-olds.

Figure 9.2 shows the annual rates of induced abortions among 12–14-year-olds from 1986 to 1995 (there were no abortions among younger females over this period).

For under 15-year-olds, the ratio of induced abortions to live births is relatively high compared with other age groups. For example, in 1995 the ratio of abortions to livebirths among under 15-year-olds was about 1:1.[1] This suggests that a very high proportion of the conceptions experienced by younger adolescent females are unplanned.

Figure 9.2: Rates of induced abortions among 12–14-year-olds, 1986–95



Source of data:
Abortion Supervisory Commitee 1996.
Note:
Rates are based on small numbers and should be interpreted with caution.

Sexually transmitted diseases

Sexually transmitted diseases (STDs) can have more serious physical consequences for teenagers than for older people. For example, younger women are at significantly higher risk of developing pelvic inflammatory disease (Cates 1991). Many agents that can cause STDs can also infect babies during the birth process.

Sexual health clinic surveillance data suggests that STDs are relatively uncommon among children. Nationally, in 1997, 45 male and 252 female new clinic patients aged less than 15 years were seen at STD clinics. These people made up less than one percent of all new STD clinic patients seen that year (ESR 1998).[2]

1 Calculated by the authors from Abortion Supervisory Committee and Statistics New Zealand data.
2 Other STD data for 0–14-year-olds are presented in Chapter 10, Communicable diseases.

In the Dunedin Multidisciplinary Health and Development Study, by age 20 years, 7.5 percent of men and 15.9 percent of women reported ever having had an STD. Genital warts and chlamydial infection were the most common STDs among men, and chlamydial infection, genital warts, and genital herpes were the most common among women (Dickson et al 1996).

International comparisons

Prevalence rates for early teenage sexual intercourse reported in New Zealand appear to be broadly similar to those found in several other OECD countries, including Canada, the United States and the United Kingdom. In these countries, between 20 and 25 percent of 16-year-olds have had sex (Friedman 1992). While the proportion of younger adolescents (that is, those under 15 years of age) who have had sex appears to be increasing in these and other developed countries (Cates 1991; Friedman 1992), it is unclear to what extent a similar trend exists amongst younger adolescents in New Zealand. Certainly, there is evidence that the proportion of 17–18-year-old New Zealanders with experience of sexual intercourse has increased substantially between 1970 and 1990 (Dickson et al 1993).

It is difficult to make international comparisons of fertility rates and abortion rates for under 15-year-olds because of a lack of data. However, fertility rates among New Zealand under 20-year-olds are lower than those of the United States, higher than those of Australia, Canada, Japan, and some European countries, and similar to those of the United Kingdom (Statistics New Zealand 1996). Teenage abortion rates in the late 1980s were low in New Zealand compared to other countries (Maskill 1991).

Risk factors

Alcohol use

Alcohol use is considered to make social situations more relaxed and give teenagers more confidence to embark on sexual activity (Holibar and Wyllie 1992; Lungley et al 1993).

The Christchurch Health and Development Study found that alcohol misuse at age 16 years was associated with a greater likelihood of early sexual intercourse and unprotected sex (Fergusson and Lynskey 1996).

Lungley et al (1993) found that 35 percent of high school students had consumed at least some alcohol on the last occasion they had sex. Males and females (as well as Māori and non-Māori) were equally likely to have been drinking. However, 13–15-year-old students were less likely than students aged 16 or more to have been drinking on the last occasion they had sex (32 percent compared to 58 percent).[3]

3 See Chapter 8 for more information on alcohol consumption.

Childhood sexual abuse

In the Christchurch Health and Development Study, 18-year-olds who had been sexually abused before the age of 16 were more likely to engage in risky sexual activity (Fergusson et al 1997). In particular, sexually abused 18-year-olds were also more likely to have experienced:

- their first (consensual) sexual activity when they were under 16 years old
- a teenage pregnancy
- multiple sexual partners
- unprotected intercourse
- STDs
- a sexual assault against them after the age of 16.

The Christchurch study concluded that the risks of childhood sexual abuse were closely correlated to adverse family factors such as social disadvantage, family instability, impaired parent-child relationships and parental adjustment difficulties. Independent of other factors, experience of childhood sexual abuse appeared to increase the risk of early (consensual) sexual activity. In turn, this early sexual activity was correlated to the other negative outcomes such as, teenage pregnancy and unprotected intercourse.

The Otago Women's Health Survey found that childhood sexual abuse involving intercourse was a significant risk factor for pregnancy in adolescence (Romans et al 1997).[4]

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4 See Chapter 11 for more information on childhood sexual abuse.

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