



THEME

Adolescence



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Sex, contraception and health

BACKGROUND

Young Australian people aged 12–25 years are sexually active at a younger age and have more sexual partners compared to previous generations. Pregnancy and sexually transmitted infection (STI) rates are high in this age group. Sexual violence, discrimination against same sex attracted youth, and associated health risk behaviours such as alcohol and drug use are also important sexual health issues for adolescents.

OBJECTIVE

This article describes current trends in adolescent sexual health in Australia, provides an update on contraception, screening and prevention of STIs, and provides practical tips on how to discuss sexual health with adolescent patients.

DISCUSSION

General practitioners can play an important role in protecting and promoting the sexual health of their adolescent patients. Together with educational and public health strategies, effective clinical care provided by GPs can help to improve current sexual health issues faced by young people and prevent long term health problems.

Sexual health is '...a state of physical, emotional, mental and social wellbeing related to sexuality... [it] requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.'¹

This holistic concept of sexual health resonates with young people's own sexual health concerns, which extend beyond biological and behavioural indicators and include safety and interpersonal relationships.² General practitioners can play a vital role in promoting and protecting the sexual health of young people. Despite barriers that young people perceive in visiting GPs, such as confidentiality and cost, Australian adolescents nominate GPs as their preferred health provider.³ However, GPs also perceive difficulties in communicating with adolescents,⁴ and many feel uncomfortable discussing sexual histories with patients, especially young people.⁵

The current state of sexual health of Australian young people

In Australia, the age of sexual debut has fallen over the past 3–4 decades. The average age of first intercourse

for males and females is 16–17 years of age and teenagers today have more partners than in previous generations.^{6,7} Young women particularly are at greater risk of unintended conceptions and STIs due to biological vulnerability, normal developmental processes, and social and cultural influences.⁸

Although adolescent childbirth rates have declined by nearly two-thirds since the early 1970s,⁹ the socioeconomic and health disparity of adolescent mothers in contemporary society is far greater than in previous generations. Most adolescent conceptions end in abortion,¹⁰ and there is much scope for reducing unplanned adolescent conceptions through effective contraception.

The very significant rise in notifications of genital *Chlamydia trachomatis* infection, greatest among females aged 15–24 years¹¹ is likely to underestimate true prevalence. Genital human papillomavirus (HPV) infection is also very common in this age group, with 50% of females acquiring the infection within 3 years of sexual debut.¹² Genital herpes is similarly common, and HSV-1 as the causative agent is more common than HSV-2 in some populations.¹³ This may be due to reducing rates of HSV-1 infection in childhood,¹⁴ but also an increase in oral sex practices among young people.^{13,14}

Adolescent pregnancy and STIs disproportionately affect young people who are socioeconomically and culturally disadvantaged. Aboriginal young women are over-represented among adolescent mothers and chlamydia and gonorrhoea notifications.¹⁵ Homeless and incarcerated youth have higher rates of chlamydia infection¹⁶ and same sex attracted young people are more likely to have STIs.¹⁷

Almost 13% of the Australian population report being frightened or forced into a sexual experience. The mean age of first being coerced into sexual activity for males and females is about 16 years, with 2.8% of men and 10.3% of women reporting sexual coercion before this age.¹⁸ A significant proportion of sexually active secondary school students report having unwanted or unprotected sex as a result of being intoxicated.⁷ Same sex attracted young people experience high levels of harassment, bullying and abuse, as well as high rates of legal and illegal substance use.¹⁷

There is relatively little research on sexuality among culturally and linguistically diverse groups of Australian young people. Female secondary students from a non-English speaking background were significantly less likely to have had sexual intercourse than those from an English speaking background in a 1997 national survey,¹⁹ but no differences were reported on in the 2002 survey.⁷ Gender roles and expectations, and beliefs about sexuality are culturally determined but vary within as well as between cultures. It is useful to explore these issues with individual patients rather than make assumptions based on generalisations or stereotypes.

Contraception and young people

Condoms and the combined oral contraceptive pill (COCP) remain the methods most commonly used by Australian young people, although up to 10% report using no contraception in their last sexual encounter. Condoms are an excellent contraceptive choice for young people as they provide protection against STIs and effective contraception (failure rate 5–7%). 'Double-dutching' – condom use in addition to another, usually hormonal, contraceptive method – should be encouraged.

Hormonal methods – oestrogen and progestogen

The COCP is safe and, if used correctly, has a low failure rate of 1–6%. Potential noncontraceptive benefits include regular menstrual cycles, reduction in menstrual flow and cramping, and positive effects on the skin. However young people are notoriously poor pill takers^{20,21} which can lead to an irregular bleeding pattern and increased risk of pregnancy. Breakthrough bleeding is poorly tolerated by young people, and is even more likely with 20 µg COCPs. These preparations should be used with care in younger

patients. The very strict regimen required for effective progestogen only pill usage usually makes them unsuitable for young people.

Longer acting combined contraceptive methods overcome the need for daily pill taking. Contraceptive patches and combined injections are not yet marketed in Australia but the vaginal ring (NuvaRing) became available in February 2007. This plastic ring is placed within the vagina and steadily releases both oestrogen and progestogen over 3 weeks. After a ring free week, during which withdrawal bleeding occurs, the user inserts a new device. The ring has a failure rate of less than 1% and despite the very low hormone dose of only 15 µg ethinylloestradiol per day the constant absorption provides excellent cycle control. The device is 'one size fits all' and is as easily inserted as a tampon. Most couples will not be aware of its presence during sex. The device costs the same as nonsubsidised COCP, which makes it unaffordable for some young people.

Progestogen only methods

The oldest of these methods is depo medroxyprogesterone acetate (Depo Provera, Depo Ralovera). This is given by intramuscular injection every 12 weeks. It is convenient and effective, with a failure rate of 0.3%. Due to adverse effects on bone density with long term use it is usually not recommended for younger women. The progestogen IUD Mirena, with a failure rate of 0.2%, is unsuitable for most young women. It is technically more difficult to insert and there remain concerns regarding STI risk and pelvic infection.

The contraceptive implant (Implanon) has been widely used among Australian young women since it became available in 2001. It slowly releases the progestogen etonorgestrel over its 3 year life span. The failure rate is less than 1% and it is rapidly reversible. As follicular oestrogen levels are maintained, there is no increased risk of bone loss even with long term use. However, due to the often unpredictable bleeding pattern, about 20–30% of implants are removed prematurely. The device is Pharmaceutical Benefits Scheme (PBS) subsidised making it generally affordable. Conspicuous initial local bruising of the upper arm may cause concern, particularly during summer, and young women should be warned about this.

Emergency contraception

Emergency contraception (EC) has the potential to reduce the rate of unintended pregnancy rate by 50%.²² Progestogen only EC (Postinor 2) has been dispensed by pharmacists in Australia since 2004 and costs approximately \$30. It should be commenced within 120 hours of unprotected sex, although it is more effective the

earlier it is used. Educating potential users about EC is an important role for the GP.

There is now evidence that a single dose of 1500 µg of levonorgestrel is not only easier to use but is slightly more effective than the previously recommended divided dose and a single tablet preparation should be available soon. Where cost is a problem, 50 tablets of a levonorgestrel minipill (Microval/Microlut) provides an equivalent dosage at a fraction of the cost for those entitled to subsidised pharmaceuticals.

Preventive sexual health – new developments

A highly effective quadrivalent vaccine against HPV types 6, 11, 16 and 18 became available in Australia in late 2006. These HPV types are responsible for 70% of cervical cancers and 90% of genital warts. The vaccine is indicated for females 9–26 years and males 9–15 years and should ideally be given before the onset of sexual activity.²³ In April 2007, the National HPV Vaccination Program commenced, providing the vaccine free to girls aged 12–13 years through schools. There will be a 2 year catch up program for females aged 13–18 years in schools and women aged 18–26 years will be delivered through GPs.²⁴ In time, this program is likely to have a considerable impact on rates of vaccine type specific HPV disease in both young and older women.

Australia released its first ever national Sexually Transmissible Infections Strategy in 2005 with young people a priority target group and the development of a national screening program for chlamydia one of the goals.²⁵ The strategy identifies general practice as the most appropriate setting for implementing a national chlamydia screening program. Currently annual screening of all (asymptomatic) sexually active young people under 25 years of age is recommended. Chlamydia infection should be screened for using a nucleic acid amplification test (PCR or LCR) on an endocervical swab or first pass urine sample.²⁶ Oral or rectal swabs should be considered depending on sexual practices.

Conclusion

Young people's sexuality often causes controversy and concern among adults. The reasons for this may be on moral grounds or because of concomitant health risks and threats to wellbeing. In western secular societies, the medical profession has been at the forefront of dealing with human sexuality for over a century. Medical advances such as highly effective contraception, have allowed more freedom for sexual expression and more openness for the discussion about sexual difficulties. However, young people's sexual health remains a serious concern, and

GPs can respond to this through preventive sexual health counselling and clinical care. General practitioners have a golden opportunity to help advance and promote sexual health in this age group.

Case study – Matt

Matt, 16 years of age, has mild asthma. He attends for a medical certificate because he has had the 'flu' and missed 2 days of school. You have not seen him for about 8 months. This is a perfect opportunity to discuss preventive health, including sexual health.

How would you bring the topic into the consultation?

Taking a sexual history from a young person when sexual health is not the presenting problem can feel awkward for both the GP and patient. The following key points might assist.

- **Engagement** necessarily precedes delving into highly sensitive and personal issues. Young people are generally willing to answer questions if they feel that they can trust their GP and understand the purpose of the discussion. Sexual health can be 'put on the table' as an important health issue by the GP without taking a detailed sexual history in the first instance
 - **Screening for health risk behaviours** (including sexual activity), psychosocial and sexual development among adolescents is one of the recommended preventive activities in general practice.²⁷ A useful way to accomplish this is via the HEADSS schema²⁸ (**h**ome, **e**ducation/employment, **a**ctivities, **d**rugs, **s**ex and **s**uicidality)
 - **Seeking consent** to take a sexual history is an important part of the process
 - **Plan future consultations** for sexual (and psychosocial) health screening if there is insufficient time, but introduce the subject when the opportunity presents.
- Examples that illustrate some of these key points are outlined in *Table 1*.

Matt agrees that you can ask him further questions. You don't know whether he is sexually active or whether he has had any romantic relationships.

Once engagement has occurred and you have permission to take a sexual history, there are a number of areas you might want to explore. The following is an 'ideal world' scenario, not all of which might be appropriate during this consultation. The discussion can be continued at a future consultation that should be arranged before Matt leaves today's consultation. Being proactive is important with adolescent patients.

Table 1. Bringing the topic into the conversation

State what you are about to do: 'Matt, since you're here it seems like a good opportunity for us to discuss your health more generally'

Normalise the psychosocial history: 'part of a thorough health check includes asking about behaviours that could affect your health, such as using drugs or alcohol, or sexual activity'

Seek consent: 'Would it be okay if I ask you some personal questions? I ask these questions routinely with all my young patients. This will include questions about any sexual feelings and experiences you may have. You don't have to answer any if you don't wish to'

Repeat the confidentiality statement you made at the outset (or during a previous consultation): 'I just want to remind you that anything you tell me will be kept confidential, unless your or someone else's immediate safety is under threat. I will not repeat any personal information you share with me with anyone else, including your parents, without your permission'

How will you first bring up the issue of sex and sexual health?

At Matt's age, about half of young people in Australia have had sexual intercourse. The majority of young people aged 16 years have had some sexual contact, such as deep kissing or petting.⁷ 'Matt, at your age some young people have had sexual experiences and some have not. Have you had any romantic or sexual relationships?'

Sometimes a 'third person' approach is also useful, particularly if the patient seems less, rather than more, mature for their age, or if they (or you) feel anxious or embarrassed. 'Matt, by 16 years of age some young people have had sexual experiences and some haven't. Have any of your friends had sexual relationships? What about you?'

Matt replies that some of his friends have girlfriends but that he doesn't and he has not had sex yet. He looks a little embarrassed, not making eye contact, and becomes slightly fidgety.

How could you now proceed?

It can be helpful at this point to acknowledge Matt's feelings: 'You look as though you're feeling a bit embarrassed, that's fine if you are, I hope it's okay for me to keep talking about this?'

Matt nods his consent. You can now gently explore his sexual development by asking about his feelings, attractions and any experiences he has had. 'You say you haven't had a girlfriend. How do you feel about relationships?' 'Are you attracted to girls, or perhaps guys, or both?' 'Have you had any sexual experiences with anyone such as touching or kissing?' If affirmative: 'Were those experiences with girls, or guys, or both?' 'Do you have any questions or concerns about your sexual development, such as masturbation or wet dreams?'

Matt replies that he has kissed a couple of girls that he

liked, at parties, but nothing else happened. He says he is attracted to girls and doesn't think he's attracted to guys. He says that he doesn't have any worries about his sexual development or functioning.

Is there anything else you would like to ask in relation to his sexual health?

Asking about unwanted sexual contact is also important during a comprehensive psychosocial history. 'Matt, I would also like to ask about whether you have had any unwanted sexual contact. Have you ever been touched sexually without wanting to be, or been pressured or forced into doing anything sexually, without giving consent?'

Part of screening for risk and protective factors in young people includes asking about supports and connectedness. 'Matt, is sex and sexual health something you could talk to one of your parents about, or another adult in your life that you trust? Who could you talk to if you were worried about something to do with sex?'

Matt denies any unwanted sexual contact. He says that he can't talk to either of his parents about sex because they are very religious and think sex before marriage is wrong. He mentions that a gay uncle has been 'disowned' by his parents.

How will you conclude this part of the consultation?

Try to leave Matt with the feeling that he can trust you and talk to you about his sexual health in the future. 'Sexual health is something that all doctors deal with, so if you ever do have any concerns about your sexual health, including your feelings or who you're attracted to, or difficulties talking about sex with your parents or anyone else, please feel free to come and see me and perhaps I can help. It can be especially confusing if you have any feelings that you think go against your parents or your religion, such as homosexuality. If you do start a relationship with someone and would like information about looking after your sexual health you can also talk to me about that.'

Case study – Sandy

Sandy, 15 years of age, requests a prescription for the 'pill'. She has been sexually active for the past 6 months with her boyfriend Ryan, aged 17 years. They have been using condoms until now but Sandy says 'they both hate using them'. Sandy tells you: 'I just can't go there (talk about sex) with my parents', and she does not want them to know either that she is sexually active or that she is using the pill for contraception.

How do you want to approach this consultation?

In contrast to *Case 1 – Matt*, this presentation is directly relevant to sexual health. Nevertheless it is still important to engage, seek consent to take a sexual history, screen for sexual health (and other psychosocial) issues and plan for ongoing care.

Engagement can be facilitated by acknowledging the positive health seeking step that Sandy has taken in coming to see you, stating that it is very likely that you can prescribe the pill for her, and informing her about her rights to confidential health care. You would also explain the exceptions to this (including suicidality, homicidality and abuse, as she is under 16 years of age).

Can a doctor legally prescribe the 'pill' to Sandy even though she is below the age of consent?

Legal issues to consider are:

- age of consent to have sex – you do not have to report Sandy and Ryan for engaging in consensual sexual activity
- child protection – if you believe that Ryan is abusing Sandy, or if she discloses or you suspect other abuse, then you are obliged to report this to child protection authorities (except in Western Australia)
- consent to medical treatment. In New South Wales and Northern Territory, Sandy can legally consent to medical treatment on her own; in other states and territories you need to perform a competency assessment. This involves assessing whether she has a full understanding of the treatment being prescribed, and shows maturity. For all patients, regardless of age, you need to obtain informed consent for treatment.

What other sexual history do you want to take?

- Number and gender of partners: 'Sandy has Ryan been your only sexual partner? Have you had any other partners? Were they male, female or both?'
- Use of condoms and contraception, including knowledge about how to use condoms properly
- History of coercion or violence, feelings of safety within the relationship
- Symptoms of STIs
- Sexual practices such as oral sex.

What other (noncontraceptive) issues might need discussion?

- Explore her relationship with Ryan – her feelings of safety, consensual nature of relationship

- Explore her relationship with her parents and her stated anxiety about them finding out. It can be useful to discuss hypothetical situations (eg. using role play): 'Sandy you said you couldn't possibly talk to your parents about your sexual relationship with Ryan, and that's a common way for young people to feel. I'm just wondering though if there are particular reasons why you feel so strongly about this? How do you get on with your parents? What do you think would happen if they found out you were sexually active? Let's imagine that your mum finds your pills at home and asks you what's going on, what do you think you'd say?'
- Explore family and cultural issues as these will influence Sandy's attitudes and understandings of her emerging sexuality. Given the concern about her parents' potential reactions, this would also be appropriate: 'People's attitudes and beliefs about sex are usually influenced by things such as their family, religion, or cultural background. Can you tell me a bit about your own family's background?'

What preventive sexual health do you want to discuss now?

- Check her hepatitis B immunity
- Discuss HPV vaccination
- Counsel her about condoms and explore her understanding of their benefits, whether she and Ryan know how to use them properly, what it is they don't like about them
- Offer her a chlamydia test
- Inform her of EC.

Sandy's mother calls you the following month saying she has found a prescription for the pill in her daughter's bag and wants an explanation.

What are a doctor's responsibilities in such a situation?

It is important to maintain patient confidentiality. You must not discuss Sandy's health issues without having obtained Sandy's permission. Therefore you can give Sandy's mother a general response: 'I can't give any information about patients without their permission. However, I tell all my young patients that if there are any concerns I have about their safety then I will take steps to keep them safe, and that can involve talking to parents. I also encourage all my young patients to discuss their concerns with their parents'.

You may also wish to ask Sandy's mother whether she has already brought up her concerns with her daughter, and encourage her to do so directly.

Resources

For GPs:

- The GP Resource Kit: www.caah.chw.edu.au/resources/#03

For young people (and GPs):

- www.reachout.com.au (mental health promotion but covers many issues including sexual health)
- www.fpahealth.org.au (sexual and reproductive health)
- www.yoursexhealth.org (sexuality and sexual health for young people)
- www.getcluedup.com.au (chlamydia and how to access services)
- www.2totango.com.au (safe sex and young people).

Conflict of interest: none declared.

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