Risk-taking behaviour of young women in Australia: screening for health-risk behaviours

Michael R C Carr-Gregg, Kate C Enderby and Sonia R Grover

ADOLESCENCE IS A TIME of great change, when young people take on new roles and responsibilities, renegotiate relationships with adults, peers, and the community, and experiment with things symbolic of adult life. These developmental tasks are often accompanied by the adoption of risk-taking behaviours that compromise health. Healthy risk-taking is a positive tool in an adolescent's life for discovering, developing, and consolidating his or her identity.[1] It is the extent to which an adolescent engages in health-risk behaviours, and the overall impact of these behaviours on personal health and development, that are of increasing public health concern. The research suggests that young people who participate in multiple risk-taking behaviours increase the chance of damaging their health.

We review the prevalence of a range of health-risk behaviours and discuss challenges faced by general practitioners in assessing and treating those at risk. We also discuss a useful framework for identifying risk and protective factors, and present a psychosocial screening device.

ABSTRACT

- Healthy risk-taking is a normal part of adolescence.
- Young people who participate in multiple risk-taking increase the chance of damaging their health.
- There appears to be a growing range and prevalence of health-risk behaviours among young women, notably in their use of alcohol and marijuana.
- Research suggests that such health-risk behaviours may be related to psychological factors such as stress and depression.
- General practitioners have a central role in identifying and preventing health-risk behaviours and associated mental health problems in young people.
- Comprehensive assessment includes a series of screening questions about home, education (or employment), activities, drugs, sexuality and suicide for young people, known as the HEADSS technique.

MJA 2003; 178: 601–604

Health-risk behaviour and outcomes

Risk behaviour has been defined as "behaviours that increase the likelihood of adverse physical, social, or psychological consequences" (M D Resnick, Professor of Pediatrics, School of Medicine, and Professor of Public Health, University of Minnesota, personal communication). The first comprehensive survey of Australian women's health, the Australian Longitudinal Study on Women's Health, provides a snapshot of young women's health-risk behaviours. The survey investigated three age cohorts (young, mid-age and older), with women aged 18–23 years making up the young cohort.[2] A summary of findings from this and other studies on a range of health-risk behaviours is presented below.

Tobacco smoking

- The impact of smoking on women's health may be compounded by its effects on gynaecological health and fertility (menstrual symptoms and miscarriage).[3]
- Twenty per cent of women aged 18–23 years now smoke regularly, and another 12% smoke occasionally.[2]
- Findings for a younger age cohort suggest that 6% of girls aged 12 years and 30% of girls aged 17 years are current smokers.[4]

Alcohol use

- Seventy per cent of young women engage in "binge drinking" (five or more drinks on one occasion) at some time, with 19% doing so on a weekly basis.[5]
- Twenty-two per cent of females aged 14–19 years drink between nine and 30 alcoholic drinks on one day.[6]
- Excessive alcohol use is associated with a range of other health-risk behaviours, including unsafe sex, unwanted pregnancy, drink-driving and road accidents, violence, and criminal activity.[7]

Illicit drug use

- The proportion of young people using illicit drugs increased between 1995 and 1998 for all drug types surveyed (marijuana/cannabis, painkiller/analgesics, tranquillisers/sleeping pills, steroids, barbiturates, inhalants, heroin, amphetamines, cocaine, naturally occurring hallucinogens, LSD [lysergic acid diethylamide]/synthetic hallucinogens and ecstasy).[7]

Kew, VIC.
Michael RC Carr-Gregg, BA(Hons), MA, PhD, MAPS, Adolescent Psychologist.
RMIT University, Melbourne, VIC.
Kate C Enderby, BA, GradDipHealthPsych, Doctoral Student, Department of Psychology and Disability Studies.
Carlton, VIC.
Sonia R Grover, MB BS, FRACOG, Gynaecologist.
Reprints will not be available from the authors. Correspondence: Dr Michael R C Carr-Gregg, PO Box 2462, Kew, VIC 3101.
MichaelOzzypsych@aol.com

- While 38% of 14–19-year-olds reported use of any drug, 20–29-year-olds reported the greatest proportion of recent use (40%).
- Twice the number of teenage girls use drugs compared with their male counterparts.[7]
- Twice the number of girls aged 14–19 years have experimented with cocaine (2.5%) and heroin (2.3%) compared with males of the same age (1% and 1.1%, respectively).[6]
- Cannabis was reportedly the most widely used illicit substance by both males and females, with rates of lifetime use being almost identical (45%).[7]

Sexual behaviour[8]

- Among Year 10 and 12 students, both males and females were more likely than not to use a condom during sex.
- Forty-four per cent of males and 46% of females in Year 12 reported ever having sex with the use of a condom, compared with 26% of males and 31% of females reporting ever having sex without the use of a condom.
- Between 1991 and 1998, notifications of chlamydial infection for the total population increased from 105 to 292 per 100 000. It has been suggested that nearly 60% of all cases reported in 1998 were among the youth population, and that notifications for females were 2.4 times greater than for males (compared with 1.6 times in the total population).

Dieting and health[9]

- Most young women surveyed were within healthy weight limits, but 74% wanted to weigh less.
- Thirty per cent of young women categorised as being underweight wanted to lose weight.
- Women categorised as "frequent dieters" (five or more times in the previous year) were more likely than occasional and non-dieters to be depressed, to binge eat, to have engaged in one or more purging behaviours and to be dissatisfied with their body weight and shape.

Physical inactivity[10]

- About half of the young women surveyed reported levels of physical activity below those currently recommended.
- Women living in rural and remote areas were more active than those living in the city.
- Low to moderate levels of physical activity, compared with no activity, are associated with significantly better health.

Motor vehicle accidents[11]

- The rate of self-reported motor vehicle accidents among 1199 young women over a recent 3-year period was 1.87 per 100 000 km compared with 0.59 per 100 000 km for 1564 mid-age women (45–50 years).
- Riskier driving among young women was associated with stress and habitual alcohol consumption.
- Women born in non-English speaking countries had a significantly higher risk of accidents compared with Australian-born women.

Mental health problems

- A common outcome of health-risk behaviours is mental health problems, which currently top the list of health concerns for young women.[12]
- Depression is reportedly the leading cause of morbidity for young women, and occurs at three times the rate of depression in young men.[12]
- Depression is associated with an increased incidence of health-risk behaviours such as smoking, alcohol use and illicit drug use.[13]

Emerging trends in the health behaviour of young women

The emerging pattern in young Australian women is one in which health-risk behaviours are clustered, and often exist alongside emotional and mental health problems. The prevalence is increasing and the age at which they are adopting the behaviours is falling. Behaviours such as smoking, binge drinking and unhealthy eating are associated, and young women with any of these risk factors are at greater risk of being stressed.[2] Symptoms of depression are associated with a range of health-risk behaviours, such as alcohol and substance use, weight-control behaviour, smoking and physical inactivity, and it is well known that depressive symptoms are the greatest risk factor for both fatal and non-fatal self-harm in adolescents.[14]

The report that teenage girls have much higher rates of drug use and experimentation than teenage boys is especially concerning. Their higher rates of cannabis use may be, in part, the result of higher levels of depressive illness and the tendency for young women to associate more with older men (who may be more likely to use cannabis), or it may be that the recent anti-tobacco campaigns may have convinced young women that cannabis is a "safer" substance.

Challenges faced by GPs

GPs are ideally placed to detect and manage these health-risk behaviours. It has been suggested that the greatest barrier to effective early intervention in adolescent health is engagement with the young person.[15] Many young people are anxious about seeking help for health-related problems, particularly if their problems are serious or involve sensitive issues.[16] While adolescents do visit GPs, their main complaints include dermatological, respiratory and musculoskeletal problems, rather than the major causes of disease burden, health-risk behaviours and mental health.[15]

The greatest challenge for doctors, therefore, is to successfully engage young patients in a dialogue about their health behaviour with a view to assessing their level of health risk, and to provide advice and support where needed.[16] The key components of effectively engaging young people are listed in Box 1.

One of the challenges faced by GPs in assessing and treating adolescents is being aware of the many and varied treatment approaches available. In managing drug misuse, for example, harm minimisation approaches (such as needle/

1: Strategies for effectively engaging adolescent patients

- Develop an understanding of the developmental perspective of adolescence — physical, cognitive, emotional and psychosocial changes are of equal importance.
- Empower the young person by treating them as the primary client — greet and consult the young person first.
- Provide reassurance by discussing confidentiality, stipulating exceptions (suicide, homicide, abuse).
- A doctor's attitude should be friendly, open and flexible, and his or her interviewing style interactive rather than interrogative.
- Listen and take expressions of distress seriously, listening for early indicators of risk.
- The physical examination should be performed with equal sensitivity to further develop rapport.
- Remember the importance of providing feedback at the end of the session, taking the opportunity to give positive feedback.

From Sanci and Young.[16]

syringe exchange programs) are widely accepted alternatives to drug withdrawal. Discussing such options with young people communicates to them that the doctor respects their ability to make decisions about their own behaviour.

The adolescent interview

Identifying risk and protective factors

The optimal adolescent consultation involves making an assessment of the young person's level of functioning and risk in a number of areas. In his (unpublished) Howard Williams memorial oration, delivered at the 1998 Royal Australasian College of Physicians Annual Conference in Christchurch, New Zealand, Court conceptualised the "four worlds of an adolescent" (family, school, peer and inner) as the important influences on an adolescent's life. Exploration of each area (Box 2) provides a comprehensive picture of the young person's current experience, and helps in making an informed assessment of the person's health. The addition of community and cultural worlds is also recommended, especially when working in a multicultural setting. Knowledge of the balance of risk and protective factors in each area further informs the assessment process.

Known risk factors for health-risk behaviour of adolescents include:[17]

- poverty;
- poor academic performance;
- role models for antisocial/deviant behaviour;
- low self-esteem, a sense of hopelessness; and
- family history of mental and physical health problems.

Protective factors include:

- attachment to an adult carer (possibly a healthcare provider);
- independence and competency;
- high aspirations with adult support;
- effective schooling; connectedness with teachers;
- good health; and
- motivation to access resources.

Psychosocial screening for health-risk behaviour

A widely used and valuable screening device for exploring psychosocial functioning with adolescents is the "HEADSS" approach (Box 3).[18] It provides a comprehensive framework for examining the "four worlds of the adolescent", while weighing up the balance of health-risk and protective factors. Use of the "HEADSS" device helps build rapport with the young person by showing that you are comfortable discussing sensitive issues.[16]

Given the diversity in experience among adolescents of different ages, the type of questions used in the interview can be adapted considerably. For example, older clients are more likely to have plans for future employment and may no longer be attending school. In this case you may choose to substitute the word "employment" for "education". Similarly, the client's background and living circumstances must be factored into the interview. Interviews with individuals from high-risk populations, such as homeless or unemployed youth, will clearly require a very different line of questioning.

A final important factor to consider when assessing risk is the degree of connectedness a young person feels with his or her adult caregivers. Research suggests that connectedness with parents, family and teachers is fundamental to positive health outcomes.[19]

While a detailed review of treatment options is beyond the scope of this article, doctors must provide feedback to young people about their assessment, and negotiate a management plan with them. Naturally, the intervention will depend on the degree of health risk of the young person, as well as his or her receptiveness to receiving advice and support. While remaining non-judgemental and open, it is important that doctors express concern about health-risk behaviours, but provide hope by suggesting treatment options.

If intensive, long-term treatment is required, GPs may need to refer the young person to an appropriate treatment service. A number of youth-specific treatment centres exist (eg, the Action Centre and [in Melbourne] YSAS [Youth Substance Abuse Service]) which provide a range of services for young people and typically take a harm-minimisation approach. Referral to specific health professionals, such as psychologists, drug counsellors or social workers, may also be necessary, depending on the outcome of the assessment. A challenge for GPs is to keep abreast of the range of

2: Influences in each of the "Four worlds of the adolescent"[17]

Inner world	Temperament, mental and physical health, intelligence, self-esteem and genetic factors.
Family world	Family dynamics, history of illness, relationships, culture and spirituality.
Peer world	Friendships, activities, pro- or antisocial groups.
School world	Academic and sporting achievements and ability, relationships with teachers and peers.

treatment options available for young people, and to have information resources at hand (eg, the facts sheets on websites such as www.reachout.com.au) that young people can take away with them. Having an area in the clinic waiting room where information brochures are kept is a non-confrontational way of giving adolescents access to information.

Age of consent and confidentiality

GPs who treat young people need a good understanding of the law relating to age of consent and confidentiality of medical treatment, and the conflicts that can arise between screening for risk behaviour and legislative reporting requirements.[20]

The rights of parents in relation to medical matters concerning their children are subject to the ruling of the House of Lords in the case *Gillick v West Norfolk and Wisbech Area Health Authority*.[21] This case concerned a young woman's right to consent to medical treatment without her parents' knowledge. Lord Fraser said that the degree of parental control varied according to the child's understanding and intelligence, and Lord Scarman further opined that parental rights only existed so long as they were needed to protect the property and person of the child. He said:

> As a matter of law the parental right to determine whether or not their minor child below the age of 16 will have medical treatment terminates if and when the child achieves sufficient understanding and intelligence to enable him to understand fully what is proposed.[21]

Knowing that young women under the age of 16 years who show sufficient maturity and understanding can consent to treatment without the knowledge of legal guardians is crucial to GPs treating young women.

3: Example of HEADSS[18] screening questions

H Home
- Where do you live and who lives with you?
- How do you get along with each member?
- Who could you go to if you needed help with a problem?

E Education (or employment)
- What do you like about school (or work)?
- What are you good and not good at?
- How do you get along with teachers and other students (or work colleagues)?

A Activities
- What sort of things do you do in your spare time out of school?
- Do you belong to any clubs, groups, etc?
- What sort of things do you like to do with friends?

D Drugs
- Many young people at your age are starting to experiment with cigarettes or alcohol. Have you tried these or other drugs like marijuana, injecting drugs and ecstasy?
- How much are you taking and how often?

S Sexuality
- Some young people are getting involved in sexual relationships. Have you had a sexual experience with a guy or girl or both?

S Suicide
- What sort of things do you do if you are feeling sad/angry/hurt?
- Some people who feel really down often feel like hurting themselves or even killing themselves. Have you ever felt this way?
- Have you ever tried to hurt yourself?

Competing interests

None identified.

References

1. Carr-Gregg MRC, Shale E. Adolescence — a guide for parents. Sydney: Finch Publications, 2002.
2. Lee C, editor. Women's health Australia: What do we know? What do we need to know? Progress on the Australian longitudinal study on women's health 1995-2000. Brisbane: Australian Academic Press, 2001.
3. Mishra GD, Dobson AJ, Schofield MJ. Cigarette smoking, menstrual symptoms and miscarriage among young women. *Aust N Z J Public Health* 2000; 24: 413-420.
4. Hill D, White V, Effendi Y. Changes in the use of tobacco among Australian secondary students: results of the 1999 prevalence study and comparison with earlier years. *Aust N Z J Public Health* 2002; 26: 156-163.
5. Jonas HA, Dobson AJ, Brown WJ. Patterns of alcohol consumption in young Australian women: associations with sociodemographic factors, lifestyle, health practices and physical health. *Aust N Z J Public Health* 2000; 24: 185-191.
6. Alcohol Awareness Survey, Conducted for The Salvation Army by Roy Morgan Research, 14th / 15th August 2002. Available at: http://www.salvationarmy.org.au/reports/alcohol_awareness_survey2002.pdf (accessed May 2003).
7. Moon L, Meyer P, Grau J. Australia's young people: their health and well-being. PHE 19. Canberra: Australian Institute of Health and Welfare, 1999.
8. Lindsay J, Smith A, Rosenthal D. Secondary students, HIV/AIDS and sexual health 1997. Monograph Series No. 3. Melbourne: Centre for the Study of Sexually Transmissible Diseases, La Trobe University, 1997.
9. Kenardy J, Brown WJ, Vogt E. Dieting and health in young women. In: Lee C, editor. Women's health Australia: What do we know? What do we need to know? Progress on the Australian Longitudinal Study on Women's Health, 1995–2000. Brisbane: Australian Academic Press, 2001; 120-124.
10. Brown WJ, Mishra G, Lee C, Bauman A. Leisure time physical activity in Australian women: relationship with well being and symptoms. *Res Q Exerc Sport* 2000; 71: 206-216.
11. Dobson AJ, Brown W, Ball J, et al. Women drivers' behaviour, socio-demographic characteristics and accidents. *Accid Anal Prev* 1999; 31: 525-535.
12. Young women's health: depression and risk taking behaviour. Sydney: Department for Women, NSW, 2001. Available at: http://www.women.nsw.gov.au/pdf/young_womens_health.pdf (accessed May 2003).
13. Patton GC, Carlin JB, Wolfe R. Depression, anxiety and smoking initiation: a prospective study over 3 years. *Am J Public Health* 1998; 88: 1518-1522.
14. Patton GC, Harris R, Carlin JB, et al. Adolescent suicidal behaviours: a population based study of risk. *Psychol Med* 1997; 27: 715-724.
15. Patton GC, Sanci LA, Sawyer SM. Adolescent medicine. *Med J Aust* 2002; 176: 3.
16. Sanci L, Young D. Engaging the adolescent patient. *Aust Fam Physician* 1995; 24: 2027-2031.
17. Sanci L. Adolescent health care principles: training module for GPs. Melbourne: The Centre for Adolescent Health and Royal Australian College of General Practitioners, 2001.
18. Goldenring JM, Cohen E. Getting into adolescents' heads. *Contemp Pediatr* 1988; July: 75-90.
19. Resnick MD, Bearman PS, Blum RW, et al. Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. *JAMA* 1997; 278: 823-832.
20. Skene L. Law and medical practice: rights, duties, claims and defences. Sydney: Butterworths, 1998.
21. *Gillick v West Norfolk and Wisbech Area Health Authority* (1985) 3 All ER 402 (HL).

(Received 21 Nov 2002, accepted 7 May 2003) ❑