CHAPTER

Health, Illness and Medication

Although adolescence is characterized by dramatic changes in physical and social development, it is not commonly viewed as a period when illness and use of medication is commonplace. However, this view does not seem to be accurate. The ailments of young people can originate from the stress and anxiety caused by developmental changes and those aspects of adolescent life related to social adjustment and career decision making (Hechinger, 1994). Stress-related symptoms frequently take the form of recurrent headaches, backaches and abdominal pain. The survey elicited from respondents' self-reports of these health problems, and general perceptions of their health. These data are suitable for understanding the subjective experience of health, which underlies various health-enhancing or risk behaviours.

In this chapter, the relationship between a general feeling of health and other health-related variables, such as family and school relationships, nutrition and risk behaviour are examined. Also examined are trends in health problems, chronic illnesses and the medications used to deal with them. In previous reports, it was noted that Canadian youth, and particularly girls, tended to be more likely than youth in other countries to say they had headaches and backaches. They were also more likely than youth in other countries to take medication for their ailments. When it came to their general feelings about their health, Canadian youth fell in the middle range compared to other countries with young people from Israel, France and Sweden being close to the top. Not surprisingly, youth from the Eastern European countries were more likely to see themselves as less healthy. It is difficult to know whether adolescent strains cause problems with educational achievement and family relationships or are an outcome of them.



Figure 6.1
Students who felt very healthy, 1998 (%)

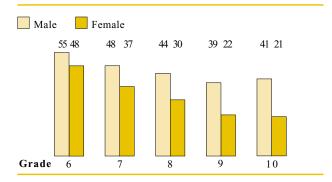


Figure 6.2
Factors associated with feeling healthy

Students who feel they are healthy and are more likely to	Grade 6 M F	Grade 8 M F	Grade 10 M F
Feel happy	\circ	\circ	\circ
Have high self-esteem	\circ	$\circ \circ$	\circ
Have a positive relationship with their parents	00	00	00
Eat breakfast daily	\circ	\circ	00
Exercise more often	\circ –	00	\circ
Be well adjusted at school	$\circ \circ$	- 0	\circ
Not feel depressed	00	$\circ \circ$	- 0
Achieve higher marks in school	- 0	$\circ \circ$	\circ
Have a good diet	- 0	$\circ \circ$	00
Not feel helpless	- 0	$\circ \circ$	- 0
Not feel left out	$\circ \circ$	- 0	
Not feel lonely	- 0	- 0	- 0
Not have bad moods	- 0	- 0	- 0
Not smoke			00
Correlation O.15 to .24 O.	25 to .34	35 to .44	1 0 .45+

General Health

Gender influences on general health are particularly strong between Grades 6 and 10. Significantly lower proportions of the girls surveyed in 1998 felt very healthy (Figure 6.1).

Over the three surveys there was a steady increase for the Grade 6 students and the Grade 8 girls in the proportion indicating they felt very healthy. There were few changes for the other groups over this time frame. This is a positive trend in that younger youth are feeling better about their general health, which may sustain them through the stressful teen years.

Figure 6.2 summarizes the relationship between feeling healthy and other health factors using the 1998 survey data. Health and happiness appear to go hand in hand. These findings corroborate the positive relationship between self-reported views of health and family relationships found in other research (Fisher et al., 1987, 1991). Fisher found that family organization (coherence) displayed the most consistent associations with adolescent ratings of general wellbeing. Family coherence was linked with emotional and physical well-being for boys and with emotional well-being and low anxiety scores for girls. The sense of feeling close and involved with family, especially with parents, was most important for female adolescents in terms of their reported health and wellbeing.

High self-esteem and a tendency not to feel helpless, depressed or lonely are also important dimensions in the broad concept of general health. Not surprisingly, feeling good about school and obtaining higher marks are also part of feeling healthy. Also, by Grade 10 those that feel healthy are less likely to smoke and engage in other health-risk behaviours.

Canadian youth, both boys and girls, are in the middle range of youth in countries reporting that they feel very healthy. Lower proportions of girls than boys in all countries report being healthy.

Health Problems

Minor physical ailments are common in adolescence and cumulative stress frequently plays a role in their development and maintenance (Greene and Walker, 1997). Headaches, infections, stomachaches, dizziness and tiredness are the most common complaints of students in the high school nurse's office (Schneider et al., 1995). Students often indicate that "not sleeping well" and "stress" most frequently play a role in their visits. Specific complaints of headache, dizziness or tiredness are associated with not sleeping well, family problems, stress, school problems and depression.

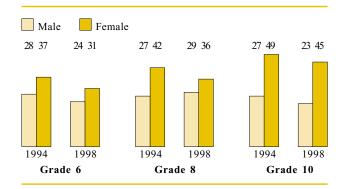
The frequency at which students have various minor ailments can be a useful indicator of students' physical and emotional health. On the 1994 and 1998 surveys students were asked how often they had experienced headaches, stomachaches, backaches and nervousness during the past six months. They were given the following response alternatives: "most days", "more than once a week", "about once every week", "about once every month" and "seldom or never".

Headaches

Figure 6.3 presents the percentages of students who indicated they had headaches once a week or more. More girls than boys at all three grade levels indicated they had at least weekly headaches. For all groups, except boys in Grade 8, there were slight declines in the proportion who indicated they had weekly headaches over the two surveys.

Figure 6.3

Students who had a headache once a week or more during the last six months (%)



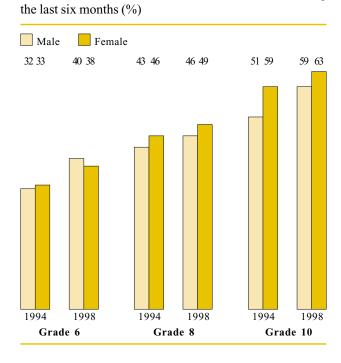
There were small differences for the boys from grade to grade, but there were clear increases for the girls, which levelled off after Grade 9. About one-third of the boys in each of the grades seldom or never had headaches. This proportion was less for girls at each grade level and declines steadily to a low of one-fifth in Grade 10. Headaches have been shown to be related to variations in the quality of life with more headaches coinciding with a lower quality of life (Langeveld et al., 1997).



Backaches

With the exception of the Grade 10 students in 1994, where girls were more likely to experience backaches at least monthly, boys and girls were quite similar in reporting backaches (Figure 6.4). Backaches in both boys and girls may be associated with exercise,

Figure 6.4
Students who had a backache once a month or more during



posture and rapid growth, while in girls they also may be associated with menstrual physiology.

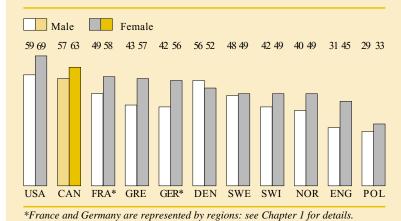
For both boys and girls, the proportions having monthly backaches increased in each of the three grade groups from 1994 to 1998, though to a lesser extent for the Grade 8 students. For both boys and girls, there was a gradual increase in the proportions experiencing backaches from Grades 6 to 10, with the overall increase being greater for the females.

In 1998 slightly higher proportions of Grade 6 boys than girls experienced weekly back pain. This pattern reversed as the grade increased, with the girls being proportionally more likely to experience back pain regularly from Grade 8 onwards.

There is a substantial body of research on backaches because it is one of the major factors for adult absenteeism from work and for general difficulties with meeting life requirements (Linton, 1998). By age 16, the frequency of low back pain was found to be very similar to the level found in adults (Burton, 1996). The relatively high incidence of weekly back problems found in our sample suggests a fundamental need for both remediation and an exercise program which young people can take into adulthood.

Figure 6.5

Fifteen year olds who had a backache once a month or more in the last six months by country, 1998 (%)



Canada ranks second highest in the proportion of young people who had backaches at least monthly, with only the American youths being higher. There was no common pattern of gender difference across the countries. It is difficult to understand why countries such as England would be so much lower than Canada on this measure.

Medication

Medication is the most commonly used form of treatment for adolescent pain and illnesses. Self-medication is known to increase during adolescence (Chen, 1993). Students were asked about their medical use of prescription and over-the-counter medications for general ailments.

Where gender differences occur in the use of medicine for a cough, girls were the higher group, though in most years and grade-level group differences were small (Figure 6.6). Differences from 1990 to 1998 tended to be small.

Girls were much more likely than boys to have used medicine for colds in the last month, particularly in the two higher grade levels (Figure 6.7). Differences across years and grades were small.

Figure 6.6

Students who used medicine for a cough in the last month (%)

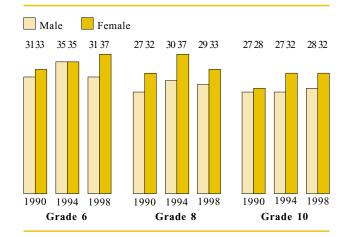


Figure 6.7

Students who used medicine for a cold in the last month (%)

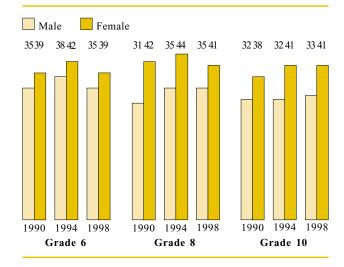


Figure 6.8

Students who used medicine for a headache in the last month(%)

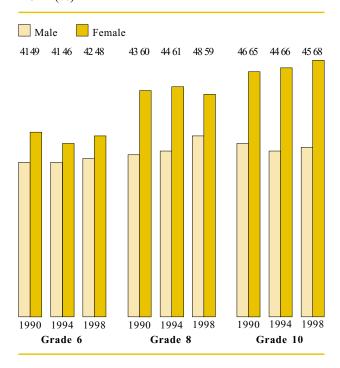
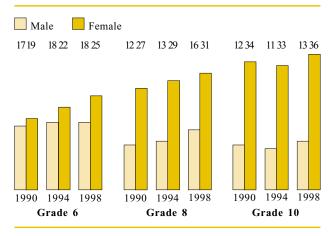


Figure 6.9

Students who used medicine for a stomachache in the last month (%)



Girls were much more likely to use headache medication than boys (Figure 6.8). The differences were greater as grade levels increased, as did the proportion of females using headache medication. Differences across surveys were small, as were the differences across grade levels for the males.

Girls were much more likely to use stomachache medication than boys (Figure 6.9). Differences were greater in higher grades as was the proportion of girls using stomachache medication. For girls, the use of stomachache medication increased from 1990 to 1998 for the lower Grades 6 to 8, but not for the Grade 10 students.

For males, the differences across time were not significant with the exception of Grade 8 students where usage increased over time. In 1990 and 1994, the Grade 6 males were more likely to use stomachache medication than the higher grade groups, but this pattern was not evident in 1998.

For all physical health problems, females used more medications than males. This trend increased with age more for stress-related problems (headache, stomachache) than for immunity-related problems (cough, cold). This indicates that girls may be experiencing more stress than boys.

Illness and Medical Conditions

Although the literature suggests that serious and chronic illnesses affect approximately 10 to 30 percent of the adolescent population, more adolescents are at risk for death and poor health outcomes that are not primarily biomedical in origin (Bauman et. al., 1997). The social morbidities (suicide, homicide, depression, injuries, substance abuse, sexually transmitted diseases, unintended pregnancy and HIV/AIDS) are primarily the result of the social environment and/or behaviour. Medical and social science research reveals two disturbing trends (Gans et al., 1990). First, many health

problems are affecting adolescents at younger ages, and second, many adolescents are simultaneously involved in several health-threatening behaviours, such as smoking and alcohol use.

In the 1998 survey, students were asked to indicate if they have a long-term illness or medical condition (Figure 6.10). Between one-quarter and one-third of males and females in each of the five grades responded yes.

The most prevalent illnesses or medical conditions in the total sample are allergies (15%), asthma (12%), hearing difficulties (1%), endocrine conditions (0.7%), persistent headaches/migraines (0.6%), cardiac problems (0.4%) and difficulties with vision (0.4%). There are no differences between boys and girls in Grades 6 and 7, although differences appear in Grades 8, 9 and 10. Differences across the grades were small for males, though there was a gradual increase in medical conditions for females from Grade 6 to Grade 9. These findings show that females are reporting increased health conditions that are not related to injury. Although males do not report increased chronic health problems, they do report increased injuries as they get older (Figure 9.1).

Figure 6.10
Students who had a long-term illness or medical condition,

1998 (%)

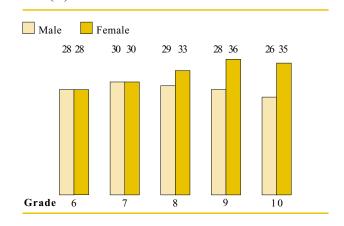
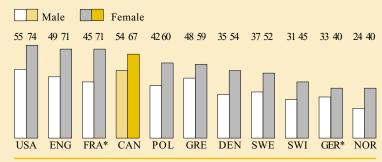


Figure 6.11

Thirteen year olds who had used medication for a headache, a stomachache, dizziness or sleeping difficulties in the past month by country, 1998 (%)



*France and Germany are represented by regions: see Chapter 1 for details.

Canadian students were among the heavier users of medication across the sample countries. Girls were more likely to use medication in all countries. Reasons for the smaller proportions of Scandinavian, Swiss and German youth who use medication are not clear.



Summary

Students' perceptions of their general health were found to be associated with regular exercise, a good relationship with their parents, self-confidence, a positive attitude towards school, a good diet, positive relationships with peers and acceptance of body image. Boys were more likely to feel healthy than girls, and there was a general decline in perceptions of health from grade to grade. Headaches were very common among young women and increased as they advanced through the grades. This was also the case with backaches, except that gender differences were relatively small. There was a surprisingly high number of students who indicated they had regular backaches, suggesting a cause for concern in the future. Canadian youth are more inclined to use medications than those from other countries, Canadian girls in particular. Overall, girls were far more likely than boys to use medication.

Approximately one-third of the girls surveyed in 1998 indicated they had a long-term illness or medical condition. The figures were slightly lower for boys in Grades 8, 9 and 10. Allergies and asthma were the most common conditions reported.