CHAPTER 2
What influences the health of individuals?

OUTCOMES
On completion of this chapter, you will be able to:
• describe how an individual’s health is determined by a range of factors (P3)
• evaluate aspects of health over which individuals can exert some control (P4)
• use a range of sources to draw conclusions about health and physical activity concepts. (P16)

OVERVIEW

THE DETERMINANTS OF HEALTH
Individual factors
Sociocultural factors
Socioeconomic factors
Environmental factors

THE DEGREE OF CONTROL INDIVIDUALS CAN EXERT OVER THEIR HEALTH
Modifiable and non-modifiable health determinants
Changing influence of determinants through different life stages

HEALTH AS A SOCIAL CONSTRUCT
Recognising the interrelationship of determinants
Challenging the notion that health is solely an individual’s responsibility
Our ability to achieve and maintain good health is influenced by more than just the decisions we make about particular health behaviours and the lifestyle that we choose to lead. The differences between the health status of various groups of young people we learned about in chapter 1 highlight that our health is influenced and determined by a range of factors. These factors, or determinants as they are commonly called, include factors relating to culture, the societies in which we live, economics and environmental conditions, along with factors relating to the individual. These factors rarely impact on individuals and communities in isolation. Rather, they are often linked, meaning that a range of determinants interact to have a positive or negative impact on health. Many of these determinants are outside the control of the individual, making it difficult for people from particular groups within Australian society to exercise a high degree of control over their health and instigate changes to bring about improvements.

In this chapter we learn about the various determinants of health in order to understand how they work together to influence the health and well-being of people. We also look at the degree to which these determinants can be modified to assess how much control individuals are likely to have over their health, both now and in the future. This assessment allows us to investigate differences between the health of particular individuals and population groups in Australia and explore reasons for these inequities.

THE DETERMINANTS OF HEALTH

It is now widely accepted that a person’s health is determined by more than just biology and the lifestyle choices that each person makes. Research has shown that the health of individuals and communities is affected by a broad range of factors relating to the community, environment and social context in which people live, along with the health behaviours that individuals adopt. The factors recognised as major influences on our health and well-being are generally referred to as determinants of health. The National health performance framework defines health determinants as ‘those factors that have a positive or negative influence on health at an individual or population level’. The key determinants of health are:

- individual factors, such as knowledge, skills, attitudes and genetics
- sociocultural factors; for example, family, peers, media, religion, culture
- socioeconomic factors, including employment, education and income
- environmental factors; for example, geographical location, access to health services and technology.

![Diagram of health determinants]

**Figure 2.1:** A number of key determinants have a significant influence on the health of individuals and populations. These determinants are often interrelated.
While each of these factors is going to be discussed individually in the following section, it is important to understand that they do not impact on people’s health as isolated factors. Rather each determinant can be expected to have an influence on another. For example, living in an area with a high level of air pollution (environmental factor) is likely to be linked to a person’s income (socioeconomic factor). Our health status is therefore the result of a complex interaction between the various health determinants.

**Individual factors**

Individual factors are those factors unique to each person that can determine their level of health. They include:

- the knowledge we have about health and the skills we possess that enable us to act in ways to promote better health
- the attitudes and values that we place on health and the importance of leading a healthy lifestyle
- genetic factors that increase the likelihood we may experience particular health problems.

**Knowledge and skills**

The knowledge and understandings that we develop about protective and risk health behaviours, and about products and people available to support good health have an important influence on our ability to act in ways that contribute to good health. When we compare the health levels of highly educated and poorly educated people in Australia, those who are poorly educated are more likely to have serious chronic illness. They are also more likely to perceive their health as fair or poor.

Our knowledge about health comes from a variety of sources — parents, siblings, peers, teachers, the internet and the media all play a part in conveying information about health. Previous experience can also contribute to what we know and understand about particular health problems. Having knowledge does not mean that people are able or willing to make healthy choices. However, health literacy enables people to gain access to, understand and use information in ways that can promote or maintain good health. It also helps them to assess the accuracy and reliability of information they may find.

**Figure 2.2:** Health literacy provides people with greater access to health information and assists them to understand and use this information to make healthier choices.
School lessons for optimism with new mental health classes

By Bruce McDougall

MENTAL health classes will be given to thousands of high school students across the state in a bid to counter soaring rates of depression and mental illness among adolescents.

The Black Dog Institute will start rolling out a $500,000 mental health program for year 9 and year 10 students in 800 government and non-government schools from the middle of the year.

Under the program teachers will be trained to deliver messages on key mental health issues including mood disorders, at-risk personality types, recognising symptoms, the benefits of therapy and how to build resilience.

Data shows the number of children in public schools with mental health disorders, including depression and serious behavioural disorders, has almost doubled to 8000 over the past eight years.

Principals campaigning for more counsellors to handle disturbed children in schools report more mental health issues are emerging in younger students — some exhibiting violent and challenging behaviours and a lack of remorse.

The Black Dog Institute will train 1500 high school teachers nationally over the next three years to deliver the innovative HeadStrong program that uses ‘engaging and humorous’ cartoon images to convey messages to students, supported by classroom activities.

Institute executive director Professor Helen Christensen said yesterday the program was an important initiative that provided a creative way of thinking, talking and teaching about mood disorders.

‘One in five Australians will experience a mood disorder in their lifetime and up to 75 per cent of mental health issues emerge during the turbulent adolescent years,’ Prof Christensen said.

This resource is designed to target the needs of young people, with the visual format of the materials making it accessible to students of all intellectual abilities, as well as those from a low literacy or non-English speaking background.

Developed with grant monies from the NIB foundation charity in line with the NSW Personal Development, Health and Physical Education stage five syllabus, the program will be expanded to Queensland during the second half of 2012 and to the rest of Australia by 2014.

The NSW Department of Education and Communities will work with the Black Dog Institute to integrate HeadStrong into school programs.

NIB foundation chairman Terry Lawler said a NSW trial had received ‘overwhelmingly positive feedback’.

‘By providing students with an increased knowledge of mood disorders . . . the aim is to help reduce the impact on young people,’ he said.

Source: The Daily Telegraph, 7 March 2012.

INQUIRY

Developing knowledge and skills to improve health

Read the snapshot ‘School lessons for optimism with new mental health classes’, then answer the following questions.

1. Identify the knowledge and skills that the mental health program, HeadStrong, aims to develop in young people.

2. Discuss how increasing knowledge and improving skills could support young people’s mental health and reduce the incidence of depression.

The acquisition of skills related to decision making, problem solving, communicating, interacting and moving may also contribute to improved health. For example, having a wide range of movement skills provides people with
Figure 2.3: Having good movement skills enables people to participate confidently in a range of physical activities.

**Self-efficacy** is our belief in our ability to be able to carry out a particular task.

Having good health all play a part in determining someone's health. Research into the factors that affect young people's willingness to seek help for mental health issues has identified a number of key barriers to accessing help. These include feelings of embarrassment, a preference for managing problems without help, and concerns about trusting people who are potential sources of help. On the other hand, those who held positive attitudes towards health professionals are more likely to seek help. Knowledge about the type of help available and where this help could be found also served to encourage help-seeking behaviour.

**INQUIRY**

Young people's attitudes towards health

1. Consider the attitudes of young people in relation to one of the following health behaviours:
   (a) using condoms when sexually active
   (b) using a mobile phone while driving
   (c) seeking help to cope with personal problems
   (d) drinking alcohol.
2. Discuss the possible health outcomes of different attitudes regarding the health behaviour.

3. Identify factors that can have a positive or negative influence on the attitudes young people develop about the health behaviour. Explain how each of these factors influences young people’s behaviours, attitudes and beliefs.

Changing circumstances, such as parental separation, or living through particular experiences (for example, a car crash) may also see our attitudes change, leading to corresponding changes in the way we behave.

Figure 2.5: Our skin type is inherited from our parents, making certain groups more predisposed to skin cancer.

Genetics refers to characteristics, features or hereditary diseases that are genetically linked and are passed on within a family.

Figure 2.4: Attitudes towards seeking professional help can affect a person’s level of health.

Genetics

Our potential to achieve a certain level of health may be significantly influenced by genetics. A number of genetic disorders, such as muscular dystrophy and cystic fibrosis, lead to chronic ill health and decreased life expectancy. These diseases are caused by genetic information passed on by parents at conception. Other disorders such as Down syndrome, which can affect physical development and intellectual functioning, are the result of chromosomal abnormalities that occur during pregnancy.

Genetics can also play an important role in a person’s susceptibility to certain diseases or health problems. People with fair coloured skin, which is a genetically inherited trait, are at greater risk of developing skin cancer as their skin burns more easily and more quickly following exposure to the sun. Research has identified that diseases such as breast cancer, asthma, heart disease and diabetes have a genetic link, making those with a family history of these diseases more susceptible to developing the disease themselves.

The genetic information that is passed on by our parents can also positively influence our health. The genes we inherit provide us with potential in terms of intellectual capacity, physical abilities and life expectancy. For example, hereditary factors have an effect on how fast we can run, how coordinated we are and how well suited we are for particular sports. Hereditary factors therefore have an influence on our sporting abilities and likelihood of successful participation.

However, while genetics influence our health potential, there is no degree of certainty that we will inherit all of the health conditions of our parents or grandparents. Many genetic disorders are complex and do not follow a clear-cut pattern of inheritance. Lifestyle and environment also play a part, meaning that if people make positive adjustments to how they live they can reduce their risk of ill health and maximise their potential. Similarly, even though we may have inherited superior genes for both physical and...
intellectual growth and development, a poor physical and sociocultural environment can negatively affect our level of health. This reduces our potential.

**Sociocultural factors**

All individuals belong to a variety of social groups within the community in which they live. These groups and the culture that exists within them and society in general can be important determinants of health because of the influence they have on people’s values, attitudes and behaviours related to health.

Our families, peer group, the media, religion and cultural background are the sociocultural factors that exert the biggest influence on our level of health. Each of these sociocultural factors plays a significant role in shaping our values, determining our knowledge and affecting our health behaviours through the expectations they create, the health behaviours they encourage and the cultural practices they support. Assumptions relating to how certain groups should look, think and behave (for example, males and females) can create pressure to conform that leads to risk taking. Those who are unwilling or unable to meet these expectations can feel a sense of alienation that is detrimental to well-being.

**Family**

Research has shown that a person’s family and their home environment can significantly influence their health and well-being. Families are responsible for ensuring physical needs such as safe housing, food, clothing and medical requirements are met while also providing emotional support such as love and care. Research has shown that being a part of a cohesive family acts to protect the health of children and young people, and helps them cope better when they experience stressors or tough times in their life (Young Australians: their health and well-being 2011). Children living in situations of violence, abuse or neglect are at risk of immediate physical injury and emotional distress and are likely to suffer adverse consequences on their long-term physical, emotional and social well-being.

Families play an important part in promoting good health and positively influencing members of the family to behave in ways that protect their health. For example, when, what and how much food is served and eaten are all behaviours that develop within the family unit. Families that serve three daily meals containing a wide variety of nutritious foods in the appropriate amounts not only ensure that nutritional requirements for healthy growth and development are met, but also instil in children the importance of healthy eating. Family expectations

**Figure 2.6**: Masculinity can be associated with the ability to control a powerful car driven at high speed. This can encourage risk taking by young males.

**Figure 2.7**: Families play an important part in modelling good health practices.
about the type of behaviour that is appropriate and acceptable are also an important factor. Research has found that children living in households where someone smokes are more likely to take up smoking themselves, particularly when their smoking is condoned or accepted by their parents.

Families are also an important source of information and support when people experience health-related problems. In addition to providing someone to talk to and seek advice from, families can also facilitate access to medical professionals and health services. Research indicates that people who lack social support from their family have higher rates of illness and death than those who are able to use their families as a source of knowledge and assistance.

SNAPSHOT

Fitness is a family affair
By Ilsa Cunningham

The end of school holidays means there’s less time for tearing about on bikes, playing at the beach and racing around at the park.

After a day at school, it could be easier for kids to return home and flop down in front of the TV or computer than do something active.

With almost one quarter of Australian children overweight, according to the government’s Healthy Weight 2008 report, it’s important that kids get sufficient exercise to live a happy, healthy life.

According to Wollongong personal trainer and exercise physiologist Rob Battocchio, kids need a minimum of one hour of exercise each day, but preferably 90 minutes.

Exercise doesn’t have to be a drag, there are plenty of ways in which to make it an enjoyable pastime.

If parents lead by example and introduce it as a fun activity, this helps ensure the exercise continues.

Battocchio says it’s important to develop good habits early and incorporate exercise within the daily routine.

‘Actively encourage outdoor pursuits, like going to the park with a frisbee, or cycling,’ he says.

‘Introduce exercise as a regular part of your lifestyle, not something that they have to do in a controlled manner. It’s a part of recreation and fun.’

It’s no good preaching about exercise if you don’t practise it. If a parent doesn’t make time to exercise, then why should their child?

That means being a good role model, and getting active with the kids, or demonstrating incidental physical activity like walking to work or the shops, and taking the stairs instead of the lift.

A good way for a child to get some incidental exercise is to walk or cycle to school. Parents concerned at the safety risk could organise a group of neighbourhood kids to walk or cycle together.

If it’s after-school exercise you’re looking for, pick a team sport. There are plenty to choose from, and they’re also a good way to socialise.

‘Exercise is not about just the health benefits. Studies prove exercise is beneficial to being mentally acute and aware for studying, and students perform better in school-related tasks,’ Battocchio says.

Exercise also teaches kids discipline and time management, which are useful life skills.

Getting teenagers to exercise might be difficult if it’s not normally part of their daily routine. To overcome that, Battocchio suggests negotiating with your teen about physical activities they may enjoy.

Source: Illawarra Mercury, 18 February 2009, p. 27.

INQUIRY

The influence of families on health

Read the snapshot ‘Fitness is a family affair’ and answer the following questions.

1. Explain how parents can have a positive influence on their child’s level of physical activity.

2. The snapshot stresses the importance of parents being good role models.

Choose another health issue and describe ways that parents can be good role models in relation to that health issue.
Peers

Peers have a powerful influence on the decisions people make relating to health and the type of behaviours they undertake. This influence may be beneficial to their level of health or can have a negative impact. Young people can be particularly influenced by the values, attitudes and behaviour of their peers as they seek to establish their identity and feel a sense of belonging. When peer groups share common interests and similar values it can be easier to make healthy choices. For example, being part of a peer group that enjoys being active and supports the participation of people regardless of their level of ability will help people feel comfortable and encourage them to join in sporting or recreational activities.

Making healthy choices can be more difficult when the peer group is not supportive or when the values held by those in the group differ from those held by the individual. For example, it can be difficult to maintain a decision not to drink alcohol if you attend a party where everyone else is drinking and you are continually offered a drink or questioned about why you are not drinking.

Exploring the influence of family and peers

Consider the following lifestyle behaviours that can positively or negatively affect your health:
- participating in regular physical activity
- tobacco use
- eating a healthy diet
- using sun protection
- safe driving behaviour.

Explain how your family and peers have influenced your knowledge, values and attitudes in relation to each lifestyle behaviour. Determine the group that you believe has the greatest influence on your attitudes and behaviour and justify your choice. Discuss your findings with a classmate.

Media

The powerful influence that the media can have on a person’s opinions, beliefs and habits makes it an important socio-cultural determinant of health. Electronic media such as television, movies and the internet, along with written forms of media such as newspapers and magazines, all play a significant role in disseminating information relating to health. For example, advertisements about skin cancer or stories on domestic violence seek to raise awareness and
enhance people's understanding of health-related issues. It is crucial that any health-related information presented in the media is accurate, fair and balanced, as bias or inaccuracies can lead to misconceptions and confusion that can endanger someone's health.

The choices relating to health that individuals make are significantly influenced by values and attitudes promoted through the media. Research has shown that media images glamorising drug use can have a significant influence on people's attitudes towards that drug and the likelihood they will use the drug. For example, images in movies that associate smoking with positive personal qualities such as popularity, success, being cool or being masculine have been shown to contribute to positive perceptions of smoking by young people. The frequency of smoking in movies can contribute to a perception that smoking is a common, acceptable behaviour within society. Such a belief is contrary to current statistics from the National drug strategy household survey that showed more than 80 per cent of Australians were not regular smokers.

Images conveyed through the media can also have a significant impact on the expectations that society forms and the risk behaviours that arise from these expectations. Images of males driving powerful vehicles at high speed, such as in car chase scenes, or images of New Year's Eve revellers celebrating with all night drinking sessions can encourage behaviours that may lead to immediate and long-term health harms and reinforce a belief that this behaviour is acceptable and not a major concern. Similarly, the constant portrayal of images of women who are tanned, attractive and slim, and of men who are tall, tanned and muscular can contribute to beliefs about what is the ideal body shape. Pressure to conform to these stereotypes can have a considerable influence on people's self-image, their feelings about their appearance and the health behaviours they adopt in an effort to match these expectations.

The media can also assist to shift society's attitudes about particular health behaviours. Health promotion campaigns on television and radio, such as those about unsafe driving behaviours or binge drinking, are frequently used to not only raise awareness, but also to challenge people's beliefs about what is acceptable behaviour in an effort to improve health and reduce rates of mortality and morbidity.
SNAPSHOT

Under the sway of social media

By Cosima Marriner

The more time teenage girls spend on social media — caught in a world of competition for likes on Facebook, posting weight-loss progress selfies on Instagram — the more likely they are to be dissatisfied with their bodies and have low self-esteem.

New Flinders University researchers interviewed more than 1000 high school girls and found conversations about appearance were ‘intensified’ on social media, and were more influential because they involved peers.

The girls who were first interviewed in years 8 and 9 were asked about their social media habits and self-esteem, then again when they were in years 10 and 11. By then 90 per cent had a Facebook account, with an average of 475 friends and were uploading pictures of themselves to the internet. The time they spent on social media had blown out from 1 hour 45 minutes a day to 2½ hours.

Even though 80 per cent of the girls surveyed were classified as normal weight, 46 per cent said they were dissatisfied with how much they weighed. ‘Time spent on social network sites was related to lower self-esteem, body-esteem, sense of identity and higher depression,’ Amy Slater from Flinders University’s school of psychology said.

Social commentator Melinda Tankard Reist said young girls seeking affirmation via social media were ‘setting themselves up for negative mental health outcomes’.

‘They feel they have to be on display,’ she said. ‘We live in a culture that rewards exhibitionism [and] everyone is judged on their physical appearance.’

Professionals say social media has a more powerful influence on teenage girls than traditional media because it is so pervasive and interactive. Dr Slater said comments from peers are of the utmost importance. ‘A lot of the commentary is very appearance focused. [Even] a positive comment about appearance can still have a negative impact on how you feel about yourself by putting over-emphasis on appearance,’ she said.

When even Kevin Rudd posts selfies on Instagram, principal of the Ascham girls school Helen Wright said it was understandable young people thought that was expected of them. ‘They are copying so much of what they see around them [but] if people are always looking at themselves through the eyes of others, it’s going to lead to a situation where they value themselves less,’ she said.

Dr Wright advises parents not to let their children have internet access in the bedroom, to limit their time on social media, and to educate them about the positivity of images and comments they post online.

Ms Tankard Reist said the Australia’s Next Top Selfie competition was a prime example of the way social media prioritises looks. To win a VIP pass to the final of the new season of Australia’s Next Top Model and feature in Cosmopolitan magazine, girls as young as 13 are invited to post a selfie on Instagram with the hashtag antmselfie.

More than 37,000 girls have entered, with their shots streamed live on the show’s website.

Source: Sydney Morning Herald, 21 July 2013.

INQUIRY

The media’s impact on health

Read the snapshot ‘Under the sway of social media’ and then answer the following questions.

1. Identify ways in which:
   (a) young girls put themselves on display to others when using social media
   (b) peers are able to express their opinion on social media about a person’s appearance.

2. The article states that young girls feel they have to be on display when using social media. Outline factors that may contribute to this expectation.

3. Outline the health issues that were linked to regular use of social networking sites by young females.
4. According to the article “social media has a more powerful influence on teenage girls than traditional media”. Discuss whether you agree with this finding, giving reasons for your opinion.

5. Using examples, discuss ways in which the media can have a positive and negative influence on young people’s level of health. Present your ideas as a mind map.

Religion

Religious beliefs are another sociocultural factor that can influence people’s health decisions and behaviours and therefore affect their level of health. Beliefs relating to food, sexual activity and drug use are examples of areas where people’s religious faith can affect their lifestyle and choices. According to some religions people should not engage in sexual activity prior to marriage, so risks associated with sexual behaviour, such as sexually transmitted infections or unplanned or unwanted pregnancies, don’t exist for those who practise these faiths. Certain religions, such as Islam, Seventh Day Adventism and Buddhism, forbid or discourage the consumption of alcohol, meaning that the risk of suffering health problems related to alcohol is reduced for people who adhere to these beliefs. Religious beliefs and practices around food can also restrict the eating of certain types of food, influence the way it is prepared, or affect eating patterns. The teachings of Seventh Day Adventists, which emphasise diet and health, require people of this faith to follow dietary restrictions that are believed to conform to Biblical guidelines. A vegetarian diet is recommended and followers are encouraged to eat wholegrain products rather than refined foods, limit fat consumption and drink large amounts of water. Adherence to these beliefs is likely to benefit physical health by reducing health risks associated with unhealthy eating such as obesity, cardiovascular disease, type II diabetes and some forms of cancer.

Having a strong religious faith can also benefit a person’s spiritual health and well-being by adding meaning to their life, creating a sense of hope and optimism and providing support during times of adversity.

Culture

A variety of different cultures exist within society: cultures related to gender (such as male culture), age (for example, youth culture), location (for example, beach culture) and ethnicity are some examples of the cultures present in our society. Each of these cultural groups holds particular values, beliefs and assumptions that strongly influence the behaviour of its members and can significantly determine their level of health.

A person’s ethnic origins and place of birth can have both a positive and negative influence on their health status. According to Australia’s health 2012 the death and hospitalisation rates for people born overseas who migrated to Australia are generally lower than rates for people who are Australian born. Rates of disability and lifestyle-related risk factors are also lower. Diet is a major contributing factor, with many migrant groups eating the traditional foods of their culture, which often consist of highly nutritious, fresh foods. Most Asian diets, for example, consist of low-fat foods such as rice, lean meats and vegetables which are likely to support good health.

Language difficulties and cultural beliefs can create barriers that have a negative effect on health. Unfamiliarity with the Australian health-care...
Ethnicity has been shown to be a determinant of the level of participation in sporting opportunities, especially in terms of restricting involvement for women and girls. An Australian Bureau of Statistics survey in 2002 found that women born in non-English-speaking countries have significantly lower rates of participation in sports and physical recreational activities (46.3 per cent) than women born in Australia (63.6 per cent) or born in countries where English was the predominantly spoken language (66.5 per cent). Research has found that women, particularly those from non-English-speaking backgrounds, often face a number of barriers to participating in physical activity. These include:

- a lack of information about how to access programs
- poor access to female-only facilities
- lack of knowledge or empathy on the part of sporting organisations and recreation providers in relation to different cultures and their requirements
- lack of programs that take into account the needs of all family members (e.g. both women and younger children)
- lack of knowledge of the benefits of physical activity
- reluctance of many women to join existing sport and recreation programs, along with a desire to participate within their own cultural group
- a perception that sport is too aggressive and competitive
- lack of proficiency and lack of confidence in the use of English
- the prohibitive cost of sport and recreation programs
- the lack of female role models within ethnic communities who can encourage others to get involved in sport and recreation activities
- lack of access to transport to venues.

These barriers add further to obstacles such as harassment, social stereotyping, lack of time or perceived lack of time, reduced leisure time owing to family responsibilities and lack of skills or perceived lack of skills that negatively impact on the participation of women and girls in sport and physical activity.

1. Describe how cultural background can influence women’s participation in physical activity. Would it have the same degree of influence on the participation of men? Explain why or why not.

2. Predict what the health implications or consequences of limited participation in physical activity might be for the women mentioned in the snapshot if this situation remains the same.

3. The snapshot highlights a range of barriers that women often face to participating in physical activity. These include a lack of knowledge, prohibitive costs, poor access to venues, lack of skill and a perception that sport is overly aggressive and competitive. Analyse how the barriers identified in the snapshot interact with cultural background to create particular barriers to participation in physical activity for women from non-English-speaking backgrounds.

4. Discuss two other ways that cultural background can positively or negatively impact on health.

Being of Aboriginal or Torres Strait Islander descent also has a significant influence on health. Indigenous people experience much poorer health than other Australians. They have a much lower life expectancy, die at much younger ages and are more likely to have a lower quality of life as a result of experiencing ill health. Numerous factors relating to the living and social conditions of Indigenous people, along with significant levels of socioeconomic disadvantage and a reduced sense of control over their own lives, may help explain the poor health of Indigenous Australians.

Young people’s attitudes and beliefs can be a significant determinant in the health risks they are likely to experience. As discussed in chapter 1, injuries are the leading cause of hospitalisation and death of people aged 15–24 years, with transport accidents and intentional self-harm responsible for many of these deaths. A desire to be independent, challenge themselves, experiment, have fun and fit in, along with feelings of invincibility may see young people engage in numerous high-risk behaviours, that increase the likelihood they will be injured, such as binge drinking, speeding and travelling in overloaded cars. Many of these things are considered to be rites of passage from childhood to adulthood by some parts of society, leading to assumptions about how young people will behave. These assumptions can contribute to the attitudes that young people develop and can place direct or indirect pressure on them to conform to these expectations.

**Figure 2.11:** Age distribution of deaths among Indigenous and non-Indigenous people, 2006–10

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<th>Age group (years)</th>
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**Legend:**
- Non-Indigenous
- Aboriginal and Torres Strait Islander
SNAPSHOT

More than a million people drink just to feel normal

By Anthony Gough

A new report into alcohol consumption has found 4 million Australians drink out of habit, about 1.4 million of them drinking to ‘feel normal’.

The Roy Morgan survey, conducted for the Salvation Army, also showed 2.4 million people, and one-third of 18- to 24-year-olds, drink specifically to get drunk.

The Salvation Army state drug and alcohol services co-ordinator, Kathryn Wright, said the findings were alarming and showed a culture saturated by alcohol. Of the 1.4 million who say they drink just to feel normal, ‘whether that’s socially normal or biologically normal, either way it’s very concerning,’ she said. ‘The very act of getting drunk has health implications every time someone does it.’

The survey found the main reason for drinking was social: 61 per cent said they often drank to be sociable, to celebrate or because the people they were with were drinking.

Source: Sydney Morning Herald, 14 September 2010.

INQUIRY

Attitudes towards alcohol in Australia

1. Outline the key findings of the Salvation Army’s research into Australians’ attitudes towards alcohol.

2. Identify examples of celebrations where drinking alcohol is often seen as an essential to the occasion (e.g. New Year’s Eve).

3. According to the Salvation Army spokesperson, the research findings show ‘a culture saturated by alcohol’. Do you agree with this finding? Give reasons for your answer.

4. Discuss in groups:
   (a) sociocultural factors that may contribute to the belief that drinking alcohol is an important part of celebrations
   (b) how this belief might impact on people’s health.

Socioeconomic factors

The World Health Organization defines social determinants as “the conditions in which people are born, grow, live, work and age”. Furthermore, they stated that these determinants, which are significantly influenced by the distribution of money, power and resources, are largely responsible for the health inequalities that exist within and between countries. A person’s socioeconomic status has a significant influence on the likelihood that they will be exposed to health risk factors,
with those who are socioeconomically disadvantaged likely to face the greatest number of risks and therefore find it more difficult to experience good health.

Analysis of health statistics collected by the Australian Institute of Health and Welfare has consistently found differences in rates of mortality, morbidity and life expectancy between those in the higher and lower socioeconomic groups within Australia. It appears that as people move down the social class hierarchy, their vulnerability to ill health increases. They live shorter lives, suffer more illnesses and have more risk factors for ill health present in their lives (see table 2.1).

Table 2.1: Proportion with selected health risk factors and long-term conditions by socioeconomic position, 2011–12 (per cent)

<table>
<thead>
<tr>
<th>Quintile of socioeconomic disadvantage</th>
<th>Most disadvantaged (1st quintile)</th>
<th>Least disadvantaged (5th quintile)</th>
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<tr>
<td>Alcohol consumption — exceeded lifetime risk guidelines</td>
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<td>Overweight/obese BMI</td>
<td>67.2</td>
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<td>Inadequate fruit or vegetable consumption</td>
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<td>Selected long-term conditions</td>
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<td>Arthritis</td>
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<td>Mental and behavioural problems</td>
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</table>

Source: Data from selected tables in Australian Health Survey: First Results, 2011–12, Australian Bureau of Statistics, cat. no. 4364.0.55.001

**INQUIRY**

Socioeconomic determinants of health

Examine table 2.1, then answer the following questions.

1. **Compare** the health risk behaviours and health conditions of people in the least and most socioeconomically disadvantaged groups and identify areas of significant difference.

2. **Consider** reasons relating to socioeconomic factors (for example, employment, income, education) for the differences that you find.

Education, income and employment are the key socioeconomic factors where disadvantage (either in one area or a combination of areas) is likely to negatively influence a person’s level of health.

**Education**

A person’s level of education has a significant impact on their health. Education enables people to gain greater knowledge of health issues and increase their understanding of health protective and risk factors that can contribute to these issues. Research has shown that people with higher levels of education are less likely to smoke, be inactive and suffer obesity. Education also provides opportunities for people to develop skills that can assist them to assess health information and products, and access appropriate health services when required.

In addition to enhancing people’s knowledge and skills, education also serves to develop within the individual a sense of empowerment over their...
lives. This in turn increases the likelihood they will take action to improve their health.

Research has shown that engagement in education influences a person's health. Having a high level of literacy and numeracy helps people in their day-to-day living, while also enhancing their employment or post-schooling opportunities once they finish. Engagement in school also contributes to a sense of connectedness or belonging and provides young people with access to support if needed. On the other hand, school failure or leaving at an early age can make it more difficult to obtain employment, while also contributing to a sense of alienation and disconnection from society. Low levels of education, along with significant health problems such as mental health problems and substance abuse are commonly found in people who are imprisoned, highlighting the role that attaining an adequate level of education can play in supporting health.

**Employment**

Being able to secure satisfying, meaningful and regular employment has a positive influence on our health. Reports on the health of Australians have estimated that mortality rates are significantly higher for unemployed Australians than for those who are employed. Employment provides opportunities to be active, interact with others and feel a sense of control over our lives, as well as ensuring a degree of financial security. Unemployment has been linked to a loss of confidence, limited social contact, and feelings of depression and disempowerment, all of which significantly affect a person's emotional and social health. Rates of self-harm, attempted suicide and suicide have been found to be higher in people unable to find work, particularly following extended periods of unemployment, while higher incidence of cardiovascular disease and lung cancer have also been linked with unemployment.

The type of occupation a person has can also determine their health. Jobs involving manual labour, such as trades or transport jobs, have higher rates of injury and death than clerical, managerial or professional occupations. The latter group, however, may be less physically active at work as their job involves large amounts of time sitting doing computer-based work. Employment in certain jobs is likely to result in exposure to high levels of pollution or increase the risk of coming into contact with harmful substances such as asbestos, chemicals or radiation.
Influence on the Health of Individuals

Labour and high risk environments.

Injuries are more likely to occur in occupations involving physical labour and high risk environments.

PRELIMINARY CORE 1

Costs the community about $60 000. Every year lost to illness, they estimated, once valued a healthy life at $1 million — and that is a sense of greater control over their life, which enhances psychological well-being.

Poverty, on the other hand, increases people's exposure to risk behaviours likely to harm their health while also restricting their access to health services and reducing their capacity to modify their lifestyle. It also decreases the likelihood that people who are the most disadvantaged will live in safe, secure housing that is of an adequate standard. Those experiencing financial hardship tend to live in overcrowded conditions in communities with high population density, fewer transport and recreational facilities and less support services available. These living conditions add to the health risks faced by low income groups and further restrict their opportunities to seek help with health problems.

SNAPSHOT

What does it cost to be healthy?

By Rosalyn Page

Is prevention cheaper than cure? Are regular dental check-ups more expensive than fillings and root canal? Rosalyn Page investigates the economics of maintaining good health.

You can't put a price on your health — or can you? The federal Department of Health and Ageing (DHA) once valued a healthy life at $1 million — and that was in 2002. Every year lost to illness, they estimated, costs the community about $60 000.

Income

Those who have higher incomes have more money available to spend on health-related products and services, such as sporting or recreational activities, better quality food, private health insurance and alternative health services that can support good health. They have the freedom to choose from a greater range of options and the confidence of knowing they can afford whatever is needed to look after their health. This knowledge is likely to decrease stress and contribute to a sense of greater control over their life, which enhances psychological well-being.

Each year, Australians spend more money in order to be healthy. The Australian Institute of Health and Welfare (AIHW) revealed in 2006 that a staggering $86.9 billion was spent on health — or rather, illness — which is about $4226 per person. The figure has been steadily rising; 10 years ago, average health expenditure was $2146 per person...

But just how much is it likely to cost you, as an individual, to stay healthy? If you followed all the recommendations from all the health experts, how much would you spend?

If you visit the GP twice a year, you're looking at about $60 if your doctor doesn't bulk bill. If you have six-monthly dental check-ups, you'll pay about $320...
and Cancer Council sunscreen to prevent skin cancer will set you back about $60 a year.

An eye examination is covered by Medicare if the optometrist bulk bills and childhood immunisations are covered by Medicare; a week’s worth of healthy food is about $290 a person (according to US estimates) and gym membership is about $25 a week.

In total, that’s $16 880 a year to cover your basic health guidelines — you’ll pay more for medications, spectacles, private health insurance, specialists’ fees, preventative health treatments and organic food. This could add upwards of $2000 to your overall health bill.

The cost of seeing a doctor
The Australian Medical Association (AMA) recommends that people have a family doctor and see him or her when necessary (the regularity depends on your age and state of health). Women need a Pap smear every two years, which is free if your doctor bulk bills, but there are no recommendations specific to men’s sexual health. (The jury is out on whether men should have preventative checks for prostate cancer.)

If you visit a doctor who bulk bills, the cost will be covered by Medicare. The AMA recommends $60 as a ‘fair and reasonable’ fee for a standard GP consultation, although individual GP fees may differ. The Medicare rebate for a standard GP consultation is $32.80.

The cost of health cover
Last June, *Choice* magazine reported that hospital and ancillary cover costs from $600 to $1000 a year for singles and $2000 to $2500 for families. Many variables, such as which state you live in, excess, Lifetime Health Cover surcharge and co-payment can affect the premium. According to the DHA, half the benefits paid by private health insurance funds go to dental, followed by optometry, physiotherapy and chiropractic services.

But is it worth it? As an example, consider that a sports-related injury such as knee reconstruction could cost up to $8000. Medicare will cover 75 per cent of the scheduled fee as a private patient in either a public or private hospital. Private health insurance will cover most of the remaining 25 per cent, but there may be additional costs — gap costs — that have to be paid by the individual. An annual outlay of $1000 on private health insurance could save almost $2000 for one procedure.

*The cost of eating well*
A poor diet is bad for your health but does eating well cost more? Researchers at the University of Washington confirmed last year that healthy food is more expensive than junk; nutritious food costs a hefty $40 for 8400 kilojoules, which is roughly the daily requirement for a man maintaining a healthy weight, while ‘bad’ food costs about $4.

*Australian Certified Organic* magazine reported in 2003 that organically grown crops were more nutritious than non-organic ones because of the lower water content, higher soil quality and stricter pest control. Last October, an EU-funded Quality Low Input Food study found that organic fruit and vegetables contained 20 to 40 per cent more antioxidants and greater vitamin C, iron and zinc.

However, organic food will cost you more — two or even three times as much, says *Choice*. For example, organic chicken is typically twice the price of regular chicken and a dozen organic eggs costs $8 to $9, while cage eggs cost about $4.

*The cost of exercise*
Fitness Australia CEO Lauretta Stace says at least 10 per cent of the population exercise through a gym or training program, and the figure is rising. The cost of gym memberships varies but Stace believes it ranges from about $30 a fortnight to $60. But your gym membership could be contributing to personal and national savings on health costs. The AIHW reported in the 1999 *National physical activity survey* that lack of

(continued)
exercise is responsible for 7 per cent of the total burden of disease, contributing to obesity, cardiovascular disease, cancer and diabetes.

**The cost of good teeth**

Dental advice is simple: brush twice a day, floss regularly and visit the dentist twice yearly for a check-up. Choice estimates that a regular check-up costs about $124. Procedures such as fluoride are about $30 and X-rays $35 on average. That could easily add up to $500 per year for maintaining your teeth.

But if this seems high, consider that the average cost for root canal is $400 and fillings start at $100. Ignoring basic dental hygiene can also mean an increased risk of diabetes, cardiovascular disease and oral cancer.

**The cost of good skin**

The Cancer Council Australia reports that skin cancer costs the health system some $300 million every year — the highest cost of all cancers. It recommends that people, particularly those over 40, should check all areas of their skin themselves every three months for changes in shape, colour or size of pigment or a new lesion. You can do a lot to prevent skin cancer by staying out of the sun and using sunscreen.

The Cancer Council sunscreen (SPF 30+) is $60 for 2.5 litres.

**The cost of immunizations**

Common vaccines don’t cost the individual directly. The federal government’s Immunise Australia Program spent $283 million during 2005–06 for protection against 13 diseases including hepatitis B, diphtheria, tetanus and whooping cough. The program also offers a free flu vaccination for over-65s and it recently added a free cervical cancer vaccine for women aged up to 26. In the current financial year, it’s estimated that $443 million will be spent on immunisations.

**The cost of eye health**

You only need an eye check every two years, unless a condition is diagnosed, and Medicare will pay the full cost for a bulk-billed eye test every two years. If the optometrist doesn’t bulk bill, the Optometrists Association of Australia (OAA) advises that the cost will usually not be more than 15 per cent of the consultation fee or $20, whichever the lesser amount. The OAA estimates the total cost of vision disorders in Australia was $9.85 billion in 2004. If you need glasses, you’ll have to pay for the frame and lenses. That cost depends on the technology and just how fashionable you want those spectacles to be.


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**INQUIRY**

**The costs associated with maintaining good health**

Read the snapshot ‘What does it cost to be healthy?’, then answer the following questions.

1. Discuss how income can determine a person’s ability to maintain good health.
2. Identify groups of Australians that are likely to experience the greatest difficulty affording the costs of health care outlined in the article.
3. Explain the likely impact of low or limited income on the overall health and well-being of the groups identified in question 2.
4. Use the Cost of dental care weblink in your eBookPLUS to research how socioeconomic factors affect people’s ability to access regular dental care. Outline key differences between people in higher and lower income groups.
5. The costs given in this article are now out-of-date. Conduct research to update as many of the costs as possible; for example, the Medicare rebate, given here as $32.80, was $36.30 in 2014. Use a table format to record your findings and compare the costs.
6. Propose strategies that could be considered to reduce the financial burden associated with health care.
Medicare is Australia’s government-funded health scheme that subsidises the cost of medical services for all Australians and aims to ensure medical care is affordable. Social exclusion occurs when someone is denied resources, rights and services and is unable to participate in normal relationships and activities that are available to the majority of people in society.

The high cost of certain health-care services means that the quality of care received by people varies according to their socioeconomic status. While the Medicare system is designed to ensure that all Australians receive a certain level of health care, not all services are covered under the scheme (for example, dental care) and waiting lists for procedures considered non-essential are long. This can make it difficult for people on low incomes to receive treatment or see them waiting extended periods of time to access the treatment they require through the limited public health services available. Having to endure ongoing pain can lead to significant emotional distress, a reduced capacity to go about daily life, increased levels of stress for family and restrictions on social life, as well as physical discomfort, all of which significantly influence health.

It is not simply poverty that is likely to harm a person’s health. Being poor is often associated with negative stereotypes and images. For example, people who are homeless, long-term unemployed or suffering drug dependency issues are frequently labelled and looked at disapprovingly. The negative connotations that go along with being poor can also result in prejudice, discrimination and social exclusion that also work to influence a person’s health.

When discussing socioeconomic factors, the areas of education, income and employment should be considered in combination as they are all closely linked. An individual’s employment status is a major determinant of their income, while a person’s level of education plays a key role in their chances of gaining regular and rewarding employment. The Australian Institute of Health and Welfare’s Young Australians: their health and well-being 2011 report highlights that people from poorer socioeconomic circumstances ‘often experience multiple forms of disadvantage, compounding the adverse effects on their health and well-being’. Furthermore data generally show that socioeconomic status tends to remain similar across generations, meaning that ‘many young people share the same level of disadvantage or advantage as their parents’.

Environmental factors

Environmental factors are those things present in the environment in which people live and work that can affect their health in a positive or negative way. These factors may relate to aspects of the geographic location in which people live, such as the design of the built environment, the quality of the air, food and water available, and the climatic conditions they commonly experience. Clean air, a regular supply of safe drinking water and the consumption of properly handled and prepared
Rural areas are defined by the Australian Bureau of Statistics as having populations between 5000 and 99 000.

Remote areas have a population of less than 5000.

foods can all promote improved individual and public health, while well-designed communities can assist to create safe, harmonious communities. On the other hand, poor building design, increasing levels of pollution and changes in climatic conditions all contribute to poor health by increasing the number of risk factors that people face and making it more difficult to choose healthier options. Access to quality health services and fast, reliable technology also influence a person’s level of health by making it easier to obtain accurate information about health issues and seek treatment and support when necessary.

Geographic location

Studies into Australia’s health have found that people who live in rural and remote parts of Australia have poorer health outcomes than people living in major cities. They have higher death rates and higher levels of health risk factors such as smoking, being physically inactive, drinking excessive amounts of alcohol and being overweight or obese. Differences that are apparent in the health status of people living in rural areas compared with those living in urban and regional areas are complex and likely to be closely linked to other determinants of health, including socioeconomic factors and sociocultural factors. However, a number of factors specific to rural and remote environments play significant roles in determining the health of people living in these areas.

People living in rural and remote areas often have to travel long distances for work, household-related purposes and socialising. This can place them at greater risk of injury due to the dangers involved in travelling on country roads, which include long distances, poor road quality and factors such as speed, fatigue from driving long distances and animals on the road. They are more likely to face harsh living and working conditions and experience severe climatic conditions such as extreme heat, drought and floods that have the potential to negatively impact on both physical and emotional health. Injury, disease, emotional distress and financial hardship are some of the health risks that can result from experiencing these weather conditions. The remoteness of communities and the distances between people may make it harder to create or maintain social support networks. The sense of isolation and the difficulties finding emotional support when geographically isolated may contribute to poor mental health and depression.

Indigenous Australians make up a significant proportion of the population living in rural and remote areas. Current statistics estimate 15 per cent of people living in remote areas and 47 per cent in very remote areas are Indigenous. The poor level of health of the Indigenous population discussed earlier in the chapter is one factor behind the higher rates of illness and death in country areas. A number of issues relating to the geographic location of Aboriginal people who live in remote areas are likely to negatively affect their health. In particular the provision of safe, adequate housing that is supplied with electricity, clean running water and adequate sewerage systems remains problematic in some remote Indigenous communities. Disease outbreaks can occur when water becomes contaminated with harmful bacteria and viruses. Overcrowding and a lack of clean drinking water or adequate sanitation can accentuate health risks, particularly for babies and young children, and place people from these communities at risk of infectious
CHAPTER 2 WHAT INFLUENCES THE HEALTH OF INDIVIDUALS?

Fluoridated tap water is the controlled addition of fluoride to public drinking water to reduce tooth decay.

Fluoridated tap water is the controlled addition of fluoride to public drinking water to reduce tooth decay.

The built environment refers to buildings and spaces that are constructed within communities. Diseases and heavy industry increase the risk of respiratory infections, asthma, bronchitis and cardiovascular conditions. Smoke from bushfires and household heating, as well as the burning of fossil fuels also decreases the air quality. People living in particular areas may face greater risks; for example, those living near major roads or industrial areas are likely to experience higher levels of air pollution, as well as more noise pollution and higher levels of traffic congestion.

Traffic congestion can contribute to high levels of stress as motorists become frustrated and angry. It also increases the likelihood of road crashes. Spending long periods of time driving to and from work also decreases the time people have available to be physically active or to be with their families.

People who live in cities and regional areas in most states and territories in Australia are more likely to be supplied with fluoridated tap water. The Australian Institute of Health and Welfare estimating that three-quarters of Australians receive mains water containing fluoride. Studies of oral health have highlighted the significant health benefits gained by drinking fluoridated tap water, notably a reduction in dental caries and the maintenance of healthy gums and teeth.

The built environment of major cities and regional areas may also determine a person’s health. The built environment refers to buildings and spaces that are constructed within communities. These include houses, shopping centres, public buildings, roads, railways, footpaths and recreational areas such as parks. Careful planning and good design of the built environment can have a positive effect on a person’s health. The construction of cycleways and footpaths, along with the provision of adequate lighting, playgrounds, parks and other recreational facilities encourages physical activity. Adequate public transport also promotes physical activity, while at the same time reducing the number of private vehicles on the road, thereby decreasing pollution levels, crashes and traffic congestion.
Inadequate or ill-conceived planning, however, can work to harm health by exposing people to dangers or discouraging behaviours that promote improved health. For example, the small size of newly released house blocks, along with the design of homes built on these blocks, is contributing to increasing rates of obesity because small backyard areas provide little space for children to play, while large indoor entertainment areas encourage passive activities such as playing computer games and watching giant-screen televisions. The location of industrial complexes has to be carefully considered to ensure residents are not harmed by increases in pollution, traffic volume and possible chemical leaks or accidents. The creation of high-density housing estates can encourage the spread of infectious diseases, while overcrowding can also contribute to disputes, tension and social unrest within the community.

**Access to health services**

The ability to access appropriate health care at times of need is an important factor in maintaining good health. However, certain groups can find it difficult to access services and support when required. People who are geographically isolated have less access to health care and specialised treatment services. Those in remote areas particularly may rely on health care provided by the *Royal Flying Doctor Service* or other outreach services that visit communities on a rotational basis. They may also depend on medical support provided over the telephone or radio, particularly in emergencies. In these situations, people may be required to administer their own first aid or medical treatment under instruction, because of the time it takes for medical services to arrive.

*Figure 2.16*: Traffic congestion in major cities not only contributes to air pollution, it also increases the time people spend being sedentary.

*Figure 2.17*: Well-designed living spaces encourage physical activity and social interaction.

The *Royal Flying Doctor Service* provides aeromedical emergency and general health care to people living in rural and remote areas of Australia.
The range of health-care options in rural and remote areas is less than in urban areas. Access to preventative health services like screening programs and support groups is limited, and the lack of alternative health professionals, such as acupuncturists and chiropractors working in country areas, means that choices about health care can be restricted. Specialised treatment services are also limited, meaning that people may have to wait longer for health care or travel long distances to receive the necessary health care. Those with ongoing conditions may be required to be away from home for long periods of time while undergoing treatment, resulting in distress and financial hardship.

Rural patients more likely to die from cancer than those in cities

By Sophie Scott

It seems little progress has been made over the past two decades in bridging the gap between rural and city cancer patients when it comes to treatment.

A study in the Medical Journal of Australia has found cancer patients in rural and remote communities continue to be at increased risk of death from the disease compared to their city counterparts.

The paper looked at cancer deaths from 2001 to 2010. It found there was no improvement in the rates of regional and remote patients dying of cancer. In fact, for women, the disparity actually increased.

Dr Michael Coorey, from the Murdoch Children’s Research Institute, says one of the reasons death rates have not improved is because of the lack of investments in policy on how to organise cancer services so they provide the most benefit to patients.

Possible solutions could include more support for regional and remote patients to travel to metropolitan centres, and more funding for associated accommodation.

Other important programs could include specialist outreach services such as tele-health, fly-in-fly-out services and increasing building capacity in regional cancer centres.

In 2010, the federal government announced an investment of $560 million over five years in regional cancer centres.

By comparing mortality rates in metropolitan areas to populations in regional and remote areas, the authors found 8878 excess cancer deaths in remote and regional areas.

Some of the causes of increasing cancer deaths in rural and remote Australia include a higher pro-portion of Indigenous people and greater economic disadvantage.

Authors say there is also a higher prevalence of cancer risk factors, such as smoking, sun exposure, obesity, less cancer screening, delays in seeking medical attention and disparity in receiving treatment.

Ian Kamerman, the president of the Rural Doctors Association, says the disparity is likely to continue unless more specialist cancer treatment and advice is made available in regional Australia.

‘There has been an increase in numbers around the eastern seaboard but as you head further inland people have to travel further and ... the problem is people choose not to have the best cancer treatments when they live in the bush because it takes them away from their home and their family and their carers for a long period of time,’ he said.

Source: www.abc.net.au, 4 November 2013.
INQUIRY

Difficulties faced by those living in rural locations

Read the snapshot ‘Rural patients more likely to die from cancer than those in cities’, then answer the following questions.

1. In the period 2001–2010, state how many excess deaths from cancer occurred in remote and regional areas compared to metropolitan areas.

2. Describe the causes given for increasing cancer deaths in rural and remote areas.

3. Discuss why people who live in remote and regional areas may choose not to have the best cancer treatment available.

4. Explain the impact the federal government’s investment in regional cancer centres might have on cancer deaths in remote and regional areas of Australia.

People living in major cities can also experience difficulties accessing health care, especially those who rely on the public health system. High demand, particularly in areas of population growth, can result in insufficient hospital beds being available or long periods waiting to be treated. For patients without private health insurance, the waiting lists for procedures considered non-essential (for example, knee replacements) may be lengthy, meaning they may experience ongoing pain and distress for some time before being operated on.

Access to technology

Increasing use of technology, such as computers, tablets, mobile phones and electronic games, has impacted significantly on people’s health, particularly the health of young people. Studies have found that a large proportion of young people spend significant amounts of time involved in small screen recreation; that is, playing computer games, social networking, using the internet and watching TV, DVDs and videos. This regular use of technology often comes at the expense of physical activity. Excessive TV watching and small screen recreation tends to reduce the time available for physical activity and increase the time spent being sedentary. These prolonged periods of being inactive are associated with an increased risk of overweight and obesity.

Technology and my health

The National Physical Activity Guidelines advise that no more than two hours a day should be spent using electronic media for entertainment. Calculate the amount of time you usually spend each day using small screen recreation and compare this to the guidelines. Use the results of this comparison to discuss the impact that your use of technology during leisure time could have on your health.

Advances in technology have helped address some problems associated with living in rural and remote areas, particularly the distance involved in accessing health services and the scarcity of health resources available. The increasing use of computers and the internet has provided people in rural and remote areas with greater access to accurate health information that can support improvements in their knowledge and awareness of health issues. It has also helped medical professionals working in remote locations keep up to date with the latest research and advances, without having to leave their practice to attend training and professional development.
Email and the internet have reduced people's sense of isolation by allowing them to keep in touch via webcam and videoconferencing. This technology also allows doctors in remote locations to quickly and easily communicate with patients and consult with health-care providers in different locations, thereby reducing the time and travel needed to access health care. The development of scanners and digital imaging technology has reduced the time people are required to spend away from their work and family. Images are sent to remote locations for interpretation, instead of the person having to stay in larger cities and towns while they are diagnosed.

**SNAPSHOT**

**Telehealth trial declared a success**

By Brad Howarth

Ease-of-use is emerging as the critical factor for the uptake of telehealth consulting in Australia.

A six-month trial implementation of telehealth at the Royal Children's Hospital in Melbourne has been declared a success, with more than 150 patients seen and countless hours saved for families and clinicians.

The director of neurology at the Royal Children's Hospital Professor Andrew Kornberg said previous telehealth attempts, including trial consultations via Skype, had not worked, as connection dropouts and scheduling difficulties led doctors to stop using it after just one or two bad experiences. The new system uses GoToMeeting, a web-based videoconferencing service from Citrix Online.

'We're trying to make it seamless for families and doctors, and make it as business as usual,' Prof Kornberg said. 'So rather than just rolling it out and saying "here's telehealth", what we're doing is ironing out all the issues, all the glitches in the system, to make it easy for everyone.'

This included making it easier for families to book consultations and for specialists and GPs to coordinate their schedules.

The program kicked off in January and the hospital is now conducting three to four half/whole day telehealth clinics every week, treating six to eight patients per session.

Ten departments are now using telehealth, including neurology, allergy and dermatology, and uptake is accelerating. It is also being used for emergency consultations.

Prof Kornberg said that while telehealth would not eliminate face-to-face consultation, it was reducing its frequency, and was also proving crucial in assisting the hospital in keeping up with growing demand for outpatient services. Previously doctors would drive hundreds of kilometres to conduct clinics in regional areas.

'We can't continue to see an extra 10 to 20 per cent each year with a finite number of rooms,' Prof Kornberg said. 'It has opened an opportunity for us to build capacity by really using telehealth as just another waiting room and clinic room.'

Prof Kornberg said the technology was used for both consultation with patients in their homes via the internet, and at the office of a GP. He had also conducted multidisciplinary sessions with multiple specialists.

He said one of the key advantages of the chosen technology over services such as Skype was the ability to share computer screens alongside the video stream, enabling doctors to show images from computerised tomography (CT) scans and magnetic resonance imaging (MRI) scans.

'I can bring up an image and go through it with the family by sharing my screen and showing their results, their images, and I can talk through them,' Prof Kornberg said.

He said the connections achieved with a dedicated system were also more consistent than those achieved with Skype, and were easier to manage through the hospital's firewall. While restricted bandwidth to some patients' homes had made simultaneous use of audio and video problematic, Prof Kornberg said Citrix also provided access to an accompanying toll-free telephone number.

Dr Richard Bills is one GP who has made use of the system for treating allergy suffers at his practice in Woodend, 70 km northwest of Melbourne.

*(continued)*
‘We’ve really enjoyed the opportunity that the videoconferencing has provided to save people having to travel down to Melbourne to access services,’ Dr Bills said.

‘There are terribly long waiting lists for the Royal Children’s Hospital for a lot of outpatient appointments, and yet a lot of that can be managed by cooperative videoconferencing with the GPs and the specialists. And it is proving a very efficient way to reduce those waiting times.’

Prof Kornberg said his goal was to make telehealth a ‘business-as-usual’ tool within the hospital. ‘We see it as a longer-term strategy of building capacity or having better relationships with community providers and families, and that’s why we want it to proceed,’ he said. ‘So one day I would say there would be 100 clinics a week run in this way.’

Source: Sydney Morning Herald, 24 July 2012.

Using technology to improve health

Read the snapshot ‘Telehealth trial declared a success’, then answer the following questions.

1. Define what is meant by the term ‘telehealth’.
2. Outline the benefits that the medical practitioners involved in the trial found in using telehealth as a means of providing health care.
3. Consider how technology could be used to promote better health among young people in regional areas. Propose strategies that could be used to:
   (a) address the lack of youth health services in many rural areas
   (b) reduce the sense of isolation that some young people may experience.

Improvements in mobile phone and broadband coverage have also provided people in rural and remote areas with greater access to health services and reduced the time taken to get medical help. The Royal Flying Doctor Service of Australia reports that the remote consultations it provides are now primarily conducted via phone and videoconferencing rather than radio. The portable nature of mobiles means that medical assistance can be accessed faster in emergency situations. It also provides people with a greater sense of privacy when discussing health concerns compared to talking over a radio that is located within the home, particularly when the issue is one that is sensitive or the person feels self-conscious talking about. The availability of free, private and confidential phone and web counselling services by support organisations such as Kids Helpline (see figure 2.18) provides young people with a comfortable and safe means of discussing issues affecting their health and accessing help.

**Figure 2.18:** The internet allows people to access help in a confidential and anonymous way.
A number of difficulties still exist that limit or prevent the effective use of technology to support people’s health. Lack of infrastructure in rural and remote areas can restrict the access of people in the bush to fast and reliable technology. The cost involved in purchasing a mobile or personal computer and associated software and connection fees can be unaffordable for some people living in rural and remote communities, where levels of income are generally lower than in major cities. Computer illiteracy and reduced access to support services such as technical support and repairs can also limit the usefulness of technology for those who live in rural and remote communities.

**Climate change**

Global warming and the depletion of the ozone layer could potentially bring about further health concerns in the future. A love of outdoor activities, particularly those based around water, coupled with already high levels of UV radiation in Australia is likely to see increasing incidence of sunburn as **ozone depletion** brings about further increases in UV radiation. Research has also predicted that rises in temperatures in the future will be accompanied by an increasing number of deaths from heat-related illnesses, with anywhere between 8000 and 15 000 people per year predicted to die by 2100 (Woodruff et al. 2005).

**Tobacco smoke**

Tobacco smoke is a form of environmental pollution that has a particular effect on people’s health. Tobacco smoke can be inhaled from both the end of a burning cigarette and from the smoke exhaled by the person smoking. Commonly called **passive smoking**, the inhalation of this **environmental tobacco smoke** leads to numerous harmful health effects on people who are exposed to it, including increased risk of respiratory disease and cardiovascular disease, decreased lung function and increased incidence and severity of asthma attacks. Government legislation has banned smoking in most indoor buildings and areas such as pubs, restaurants, public transport and sporting venues, thereby reducing the risks people face from environmental tobacco smoke. However, smoking inside homes and cars can still place people at risk from passive smoking, with the health of babies and young children particularly affected.

While certain environmental factors such as cigarette smoking in the home can be modified by the individual, many of the environmental determinants of health are largely beyond the control of individual members of the community. Where and how people live is, in most cases, dictated by what people can afford, where they work or what facilities are provided for them in these places.
**Impact of the determinants on my health**

Consider your current health status. Would you rate your health as excellent, very good, satisfactory, poor or very poor?

Use your rating to help you analyse the influence that the various determinants of health have on your level of health. Use a table like the one below and give examples to clearly illustrate the positive and negative influences that the determinants have. Write a summary of your findings and mention how the various determinants are linked.

<table>
<thead>
<tr>
<th>Determinants of health</th>
<th>Examples of positive influence on my health</th>
<th>Examples of negative influence on my health</th>
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<tbody>
<tr>
<td>Individual factors</td>
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<td>Access to health services</td>
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<td>Access to technology</td>
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**THE DEGREE OF CONTROL INDIVIDUALS CAN EXERT OVER THEIR HEALTH**

Many of the health problems that are currently prevalent in Australia are linked to the decisions people make about their health and the lifestyle that they lead. However, a person’s level of health is not solely determined by individual choices. Nor does everyone have the same opportunity to easily make and carry out decisions that will improve their health. A range of social, economic, environmental and individual factors, which are often interrelated, all exert a considerable influence over the health choices we make and our chances of being healthy. People with economic, social and educational resources are in a better position to take action to promote their health than those who do not have access to these resources. If we have power and status within our social situation, we feel a greater sense of control over our life so are more likely to take action to improve it. Therefore the degree of control that we are able to exert over our health depends on the degree to which we can control or modify these influences.

Not all Australians are able to exert the same degree of control over their health, which has resulted in **inequalities** arising in the health status of particular population groups. Those who experience considerable disadvantage, such as Aboriginal and Torres Strait Islanders, people from low socioeconomic
groups and people living in rural and remote areas, find it hardest to exert any influence over the things that determine health, therefore they are likely to face the greatest difficulties looking after their health.

Modifiable and non-modifiable health determinants

Health determinants can be classified as modifiable or non-modifiable, depending on the degree to which they can be changed, influenced or controlled by the individual.

Modifiable health determinants

Modifiable health determinants are those determinants that can be changed or controlled so they have a different level of influence on our health. This access contributes to our sense of empowerment. People who feel in control of their lives are more likely to take control of their health. For some people, modifying the socioeconomic determinants that influence their health, such as education, employment and income, can be difficult. Their sense of empowerment and overall outlook on life can help them to overcome barriers created by their socioeconomic conditions and change their health behaviours.

One of the most important factors that allows us to take control of our health is our sense of self-efficacy. As explained, self-efficacy refers to our belief in our ability to bring about change. The stronger our self-efficacy, the greater our levels of perseverance and persistence and feelings of control. If we have low self-efficacy we are more likely to feel powerless and produce negative self-evaluations that can lead to lower self-esteem.

The health knowledge and skills that people possess is one area that can be modified to enable them to assert greater control over their health. Reliable and accurate information on issues such as how to prepare healthy meals, or ways to increase our level of activity is often available in places such as doctors’ surgeries, local newspapers and on the internet.

Many health organisations offer information in the form of pamphlets, websites or public forums to enable people to improve their knowledge of particular health issues. For example, the Family Planning Association website contains a range of fact sheets on contraception, sexually transmitted infections and other sexual health matters. These organisations can also support the development of skills. For example, the Quitnow website offers information and suggestions on how to effectively quit smoking and provides various resources and access to services such as the Quitline and...
online Quitcoach that support people who decide to give up. The provision of this information and support can allow people to gain a deeper understanding of issues that may affect their health and develop strategies to address these issues.

Figure 2.20: Acquiring knowledge and skills and choosing to accept help and support can assist people to modify their lifestyle and improve their health.

However, the degree to which people can improve their knowledge varies. Not everyone will have the literacy required to be able to understand the information available, or to determine which information is credible and reliable. Nor will everyone have the same level of access to this information. Groups who experience the most disadvantage, such as the long-term unemployed, homeless or some Indigenous people, are likely to find it most difficult to improve their health knowledge and skills due to their isolation from the community and their education level.

People also need to possess an interest or desire to improve their health knowledge and skills in order for this to occur. Health is not always the central consideration when people make decisions; it is just one of a range of factors. For many people, the long-term consideration of health often takes a very distant second place to the immediate demands and pressures of daily survival. Others may be unaware of the risks present in their environment or the harms linked to their current lifestyle, so are not looking to learn more about their health and how it can be improved. A variety of barriers therefore exist that hamper people's ability to change their knowledge and skills.

People's attitudes to health are another determinant that may be modified. Different experiences and events during our lifetime, such as being diagnosed with skin cancer or losing a friend in a road crash,
may lead to a change in our health attitudes. Health promotion campaigns are a commonly used strategy that seek to change people’s attitudes and challenge their beliefs. An example is the ‘Plan B’ campaign which aims to highlight the message that drink driving is unacceptable and reinforce the need for people who drink to make alternative arrangements to get home.

**Road safety**

Use the **Get your hand off it** weblink in your eBookPLUS to explore a recent road safety campaign that aims to challenge drivers’ attitudes to using a mobile phone while behind the wheel.

Read about the campaign and watch the Youtube clip.

1. Identify the aims of the Get your hand off it campaign.
2. Outline why this campaign was considered necessary by the Centre for Road Safety.
3. Discuss how the campaign sought to change attitudes towards the use of mobile phones while driving.
4. Do you think the campaign is likely to be effective? Give reasons for your opinion.

The likelihood that individuals will change their attitudes and thereby improve their health varies according to a number of factors. A person’s self-efficacy has a significant influence on the likelihood of change occurring because it affects their beliefs about whether they are capable of behaving differently. For example, a person who thinks that they are hopeless at sport will find it difficult to change this attitude unless they believe that practice and participation will help them improve.

An individual is also more likely to change their attitudes when they can recognise there are significant benefits from doing so. The support of others, particularly those closest to us, is another crucial factor in the likelihood of changes in attitude occurring. For example, someone with a mental health problem who feels ashamed and embarrassed is more likely to change this attitude if others reassure them and show they are comfortable talking with them about their health.

A person’s age may also affect their likelihood of changing attitudes. The need to feel that they ‘fit in’ or belong may make it difficult for young people to change their attitudes if these attitudes are markedly different from those of their peers. Attitudes and beliefs about health-related matters may also become more fixed as people age, making them reluctant to change their health behaviours.

Society’s attitudes, which are strongly influenced by particular aspects of society such as the media, religious beliefs and cultural expectations, are outside our direct control. However, we do have control over the extent to which we are influenced by those around us, such as our families and peers, and the extent to which we conform to stereotypes or expectations. We are able to hold different beliefs to those commonly held by our peers or by the community and we can choose to behave differently from others. We may also choose to challenge particular views, behaviours or decisions in an effort to change prevailing attitudes that may be limiting good health. For example, we could lobby for cycle-only lanes to encourage bicycle use, or advocate for a ban on excessively thin models featuring in magazines and fashion shows.
Non-modifiable health determinants are determinants that cannot be changed or altered.

Figure 2.22: Individuals have little control over the level of pollution present in their local environment.

Attempting to challenge the attitudes, values and behaviours of families is particularly difficult for children and young people as it is often not appropriate for them to challenge the health-related decisions of their parents. It is also unlikely that they would have the confidence, assertiveness and communication skills necessary to do so or a sufficient level of knowledge to recognise possible concerns associated with particular attitudes and behaviours. As we become older it may become easier to challenge particular attitudes or make our own choices, independent of the beliefs or decisions of our families.

Non-modifiable health determinants

Non-modifiable health determinants are determinants that cannot be changed or altered. The only factors that might be seen as non-modifiable determinants of health are genetics or heredity and some environmental factors.

Genetics

The genetic material we receive from our parents can pass on certain health conditions, increase our susceptibility to particular illnesses or see us inherit characteristics that can affect our health. This genetic material cannot be altered, although tests for certain conditions such as Down syndrome can be performed prior to conception or during pregnancy. Progress in the treatment of particular genetic conditions has meant that people born with conditions that used to be life-threatening, such as haemophilia, can generally now lead healthy, normal lives. People with a family history of a particular illness such as breast cancer can also undergo monitoring, screening and surgery before any symptoms are detected in an effort to reduce the risk of cancer developing.

Environmental factors

Factors such as geographic location, access to health care, availability of technology and other environmental factors are also largely non-modifiable. People who live in rural and remote areas have little control over the limited health services that are available, the sparse infrastructure, the occupational health hazards that are present, the social isolation that exists or the natural disasters that occur.

Similarly, people living in areas surrounded by heavy industry or high volumes of traffic have little control over the levels of air pollution that may be present in their environment. While it is possible for individuals to take precautions to reduce some risks, such as staying indoors when high levels of pollution are present, these measures do not remove long-term risks.

Individuals may also seek to modify aspects of their environment by lobbying governments for increased expenditure for health services or tighter controls on factory emissions. This is more likely to occur when people have high levels of knowledge and feel empowered to initiate change. However, the fact that poor environmental conditions generally exist in areas of lower socio-economic status means that people may not have sufficient knowledge, skills and self-efficacy to take effective political action.

Modifying levels of physical activity

A study of Sydney suburbs was conducted in 2008 by researchers from the University of New South Wales and the New South Wales Department of Health. The study found that people living in Sydney’s outer suburbs were:
30 to 50 per cent more at risk of being overweight than people living in the inner city, and
40 to 60 per cent less likely to be physically active than inner city residents.

The main factor in outer areas was the stronger tendency to use the car rather than walk as distances between facilities and services such as shopping centres were greater than in the inner city.

1. Using this information, propose reasons why people living in inner city areas are able to modify their behaviours relating to being active more easily than people in outer areas.
2. Outline the roles of governments and developers in assisting people to improve their health.

Climate change and Indigenous health

Use the Climate change weblink in your eBookPLUS.

1. Read the information about the report by Dr Donna Green into the potential effects of climate change on the health of Indigenous people.
2. Identify the reasons why the effects of climate change are a serious concern for the Indigenous people in remote areas. What health problems might become more prevalent among Indigenous people?
3. Discuss whether Indigenous people are likely to have control over their health if the predictions by health experts prove to be correct.

Changing influence of determinants through different life stages

The level of influence that the various determinants have on our health will not always be the same. At different times in our lives certain determinants may have a greater or lesser influence on our health status and health decisions. This is evident in differences in the causes and rates of morbidity between different age groups. For babies and young children, their families and determinants related to them such as their geographic location and socioeconomic circumstances are likely to have the greatest influence. This is because parents are primarily responsible for looking after the health and well-being of their children, so the care they are able to provide and the decisions they make largely determine health during a child’s early years.

As we get older and start interacting with others beyond our immediate family, other sociocultural influences such as the media can start to have a significant influence on our health. Even at a young age the media is able to exert a powerful influence over things such as children’s eating habits and choices. Concerns that advertising of fast food contributes to increased consumption of these foods has prompted debate about whether restrictions should be placed on advertising these products during children’s television programs.

Celebrities such as models, movie stars and singers feature heavily in types of media popular among young people, so their behaviour, attitudes and appearance can have a significant influence on the health-related values, decisions and behaviour of adolescents, although this influence may occur subconsciously. As we become older our skills and knowledge often increase,
assisting us to question the credibility and reliability of information and be more critical of media images. Life experiences may also see us increasingly question the information and messages communicated through the media, thus reducing the extent of its influence.

Feeling a sense of belonging with their peers is important for a young person’s identity and emotional well-being, so peers commonly have a strong influence on health during adolescence. Social pressures to behave in particular ways or to conform to certain expectations may lead some young people to experiment and take risks in relation to their health that can impact on their immediate and longer term well-being. For example, they may experiment with drugs, drive in a fast, dangerous manner, or participate in various sexual activities. Statistics regarding these behaviours show that as young people move into adulthood the incidence and frequency of these behaviours decreases, suggesting a decline in peer influence.

Changing patterns of drug use at different life stages

Research changing patterns of drug use by using the National drug strategy household survey weblink in your eBookPLUS.

1. Investigate one of the following drugs:
   - tobacco
   - alcohol
   - ecstasy
   - cannabis

Look in the chapter containing information on the drug you select and locate the table that shows a comparison of the use of this drug by different age groups.
2. Identify the percentage of people in the different age groups who indicated they used this drug daily (tobacco and alcohol) or had used it recently (cannabis and ecstasy). Present your findings as a line graph. Create separate line graphs to show use by males, females and all people.

3. Discuss how:
   (a) use of this drug may have been influenced by the various determinants
   (b) changes in the influence of these determinants may account for the patterns of use that are shown in your graph.

Changes in attitudes, values and priorities may also play a role in the changing health decisions and behaviours evident in these statistics. These changes may come about for a number of reasons, including:

- **biological changes to the brain.** Adolescence is a stage of life when hormones become more powerful and the activity in the emotional parts of the brain increases. Negative emotions can impair the brain’s ability to think rationally and logically, contributing to rash decisions and behaviour. Recent research has shown that full brain development does not occur until around the age of 25 years. The frontal lobe, which is the part of the brain responsible for planning, impulse control, reflection and decision making, is the final part to develop. This finding suggests that changes in attitudes and behaviour linked to risk taking are likely to be evident after this age.

- **greater emotional maturity and a stronger personal identity.** During adolescence young people seek to establish identity and independence. As they clarify their personal beliefs and develop a stronger sense of who they are, young people may feel more comfortable asserting beliefs that are different from social norms.

- **greater personal responsibilities.** In adulthood people tend to take on financial responsibilities such as loans, mortgages, rent or car ownership that can change the lifestyle patterns and decisions of young people. They may also become involved in long-term, committed relationships and start their own families, which may bring about changes to their behaviour in relation to things such as tobacco smoking and speeding.

- **different social networks.** The opportunity to mix with a variety of age groups and people from different backgrounds while working or studying may expose young people to different attitudes and values than those held by their peers and communities. This may also contribute to a change in their beliefs.

These various factors, either individually or in combination, may see

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**Social norms** describe the behaviours, beliefs and values that are expected or seen as acceptable within different social groups.

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**Figure 2.24:** Changing priorities and responsibilities, such as purchasing a home, can modify our health decisions and attitudes.
a person modify their attitudes and their behaviour as they move through adolescence into adulthood.

Genetics may have an influence on a person’s health at any point in their lives, depending on what characteristics or condition has been passed on from the parents. Certain inherited health problems, such as cystic fibrosis, may become apparent early in a child’s development and start having a negative effect on their health. Other health problems linked to genetics, such as breast cancer or schizophrenia, may not have an effect on a person’s health until some point during their adult life, if at all.

Geographic location may be a more significant determinant of health as we become older, especially for those located in rural and remote areas. This is because health services and personnel may need to be used more frequently, however accessing the appropriate services, particularly those involving specialised treatment, may be difficult for those living outside metropolitan regions.

**CASE STUDY**

**Control of the determinants of health**

Paul is a year 12 student who lives with his parents on a property in a small rural community in New South Wales. His two older brothers have left home and moved to larger centres to find work. They used to help Paul’s family run the property but several years of drought have meant that the farm is generating little income. The family has been struggling financially as a result. This has placed a great deal of stress and strain on all members of the family.

Last year, Paul’s father had a minor heart attack. The doctors said stress, along with excessive weight and a family history of heart disease, were the reasons for his father’s heart attack.

Paul now helps his father as much as he can on weekends and when he gets home from school. This means he has less time for schoolwork, but he knows his father can’t do it on his own and he feels a strong sense of responsibility to support his family. Paul has thought about quitting school and working full-time on the property. He has stopped playing football for the school and on weekends so that he has more time available to help. It also helps save money as the cost of travelling to games and paying registration fees was adding to the family’s financial stress.

Since Paul quit football he has put on some weight. He also feels isolated as most of his mates are working rather than attending school, so he rarely gets to see them. His parents encourage him to catch up with his friends but Paul feels so tired that he can’t be bothered.

**APPLICATION**

**Determining how much control we have over our health**

Read the case study above and answer the following questions.

1. Explain the impact of the various determinants on Paul’s health.
2. Identify the determinants impacting on Paul’s health that are:
   (a) modifiable
   (b) non-modifiable.
3. Use your lists from question 2 to assess the degree of control that Paul has over his health.
HEALTH AS A SOCIAL CONSTRUCT

The social construct of health recognises that people have different views of health based on their social circumstances and ways of seeing, interpreting, interrelating and interacting with their environment.

It is clear that people’s ability to achieve good health varies according to:
- factors present within their environments, and
- the positive or negative impacts that these factors have on health.

The recognition that individuals do not have complete control over their own health has contributed to the acceptance that health is a social construct. In other words, a person’s health behaviours and health status are significantly determined by factors relating to the social, physical and cultural environment in which they live.

Recognising health as a social construct helps us to explain why some individuals or groups experience better or worse health than others. It also allows us to understand why improving the health status of particular groups within the community can be a complex and prolonged process.

The interrelationship of determinants

Viewing health as a social construct acknowledges that a variety of social, cultural, economic and environmental factors have a significant influence on an individual’s health. It also recognises that these factors do not make their impact on individuals and communities as isolated factors, but in an interrelated way.

The conceptual framework for determinants of health shown in figure 2.25 demonstrates the links between the determinants and the health of individuals and population groups. It also highlights the complexity of these relationships.

Evidence showing how various determinants of health relate to and influence other determinants can be seen in the data that is regularly collected on the health status of Australians. These statistics show that groups that commonly suffer poorer levels of health often experience a higher number of negative health determinants in their lives. For example, Aboriginal and Torres Strait Islander peoples, who suffer much more ill health than other Australians, are most likely to:
- be in the most disadvantaged socioeconomic group
- have poorer levels of educational achievement
- have higher rates of unemployment
- work in lower paid occupations, where they experience less secure employment and lower levels of job satisfaction
- live and work in the most hazardous environments where they are exposed to higher levels of risk
- have greater difficulties accessing appropriate health services, resources and support
- have lower rates of home ownership and live in households and communities that have inadequate housing, are overcrowded, have poorer transport and lower levels of social cohesion
- have a lower sense of control, power and opportunity
- have more risk factors for ill health such as smoking, alcohol consumption, obesity and high blood pressure present in their lives.

4. Propose actions that Paul could take that would allow him to gain greater control over his health.

5. Think five years ahead into the future. Discuss whether the determinants are likely to have the same level of influence on Paul’s health. Give reasons for your responses.
Understanding the relationship between the various health determinants highlights the difficulties individuals can face trying to exercise control over their own health. It demonstrates the role that governments and communities need to play in addressing the broad range of social, cultural and economic factors that impact on people’s health. It also emphasises the importance of collaborative and targeted approaches being taken by government agencies, non-government organisations and local communities in order to bring about significant and sustainable changes.

Challenging the notion that health is solely an individual’s responsibility

Some people hold the view that health is solely an individual’s responsibility. An example of the type of understandings and assumptions that underpin this individual view of health and the implications of viewing health in this way are set out in figure 2.26.

An individual view of health has limitations in explaining people’s health status and addressing health concerns. We should now understand that bringing about improvements in a person’s health requires more than simply teaching or encouraging them to make better health choices. Poor health is not just a matter of not knowing any better. Inaction in changing our lifestyle is not simply a problem of lack of control, willpower, motivation or laziness on the part of the individual. Having sufficient health knowledge and having the support to change their health behaviours does not mean a person will...
automatically or actively choose behaviours that promote better health because they know it will be good for them. Biological, social, economic and environmental factors can present considerable barriers to an individual’s health and the likelihood that good health decisions will be easy decisions for them to make. Viewing health as a social construct helps explain:

- why certain groups behave in particular ways
- why certain groups do not have the same opportunity to achieve good personal health as others
- how behaviour can be associated with social and cultural meanings
- what the priorities of certain groups are in terms of health and well-being.

Health researchers seeking a clear understanding of the factors influencing the health behaviours of a person or group often categorise influences as predisposing, enabling or reinforcing factors. Using the example of an overweight person:

- **predisposing** factors that increase the likelihood of the behaviour might be that a parent is overweight, the family is sedentary rather than active and food choices are poor
- **enabling** factors that support the behaviour occurring might include the close availability of fast food outlets, the prevalence of junk food advertising or the shortage of suitable space in the environment for exercising
- **reinforcing** factors that help the behaviour to continue might be the absence of suitable role models to encourage healthy eating or exercising, a lack of cooking skills and the general prevalence of obesity in the community.

**Figure 2.26:** Factors underpinning an individual view of health and the implications of this view of health.

**Understandings**
- the ultimate decision in regard to health behaviour is left to the individual
- we can all make rational decisions in order to determine our lifestyle and health status.

*Example: Excess weight that is the result of overeating and lack of exercise is self-inflicted. If we want to control our weight, it is up to us.*

**Assumptions**
- if we have the ability and knowledge, we can make rational choices about our own health
- it is up to us to take control over social forces and their influence on us.

*Example: If we are overweight because of overeating and lack of exercise, we need to take control and exercise self-discipline with our own health.*

**Implications**
- the individual is blamed and made a victim by wrongly assuming that they knew what to do in the first place
- value-laden notions of ‘goodness’ or ‘badness’ are encouraged.

*Example: You need to be slim to be healthy. If you are overweight, it is unhealthy. It is your fault and you are irresponsible.*
INQUIRY

How can the determinants of health explain different levels of health within the community?

1. Listed below are a series of characters. Copy the information about each character onto a separate card and display all these character cards in a straight line in the middle of a whiteboard or sheet of butcher’s paper. Write the words ‘excellent health’ at one end of the whiteboard and ‘very poor health’ at the opposite end.
   - A 35-year-old female with a family history of breast cancer. She works as a doctor in a large inner city hospital.
   - A 26-year-old male refugee from Sudan who has recently received citizenship in Australia. He worked as a farmhand in his home country.
   - An 18-year-old male living at home with his mother and four younger brothers. He left school in year 10 and is currently unemployed.
   - A 50-year-old Aboriginal male who works as a professor at a large university.
   - A 25-year-old female who is a professional triathlete.
   - A 60-year-old farmer running a large cattle property with his two sons. The property is 200 kilometres from the nearest rural town.
   - A 30-year-old Muslim woman. She and her husband run a small business in the metropolitan area. They have three young children.
   - A 40-year-old Aboriginal male living in a remote Indigenous community. He works as a stockman on a nearby cattle property when work is available.
   - A 20-year-old male in his second year of university. His family lives in the country, but he moved to the city to study. He shares a house with three other young people and works part-time to pay his living expenses.

2. Read each of the following statements, then consider which characters would be able to answer ‘yes’ and which characters would answer ‘no’. Every time a character answers ‘yes’, move their character card forward on the continuum towards ‘excellent health’. Every time a character would answer ‘no’ move their card back on the continuum towards ‘very poor health’. When unsure, the character card should not move.
   - You can afford the cost of private health insurance.
   - You have a range of medical facilities easily available to you.
   - There are a range of facilities where you can be physically active in your local area.
   - You have a support network of family and friends who encourage you to be healthy.
   - You are likely to have good knowledge about the benefits of maintaining good health.
   - You are able to talk confidently to a medical professional about health concerns and understand information they give you.
   - You can afford regular dental checkups and to fix any associated dental problems.
   - You are able to access health information and support easily on the internet.
   - You are likely to see good health as important and understand strategies that can support or improve your own health.
   - You are encouraged to be physically active and you feel confident doing so.

3. When all questions have been considered, examine where the various characters have ended up.

4. Based on the activity, discuss as a class which individuals and groups have better or worse health than others. Explain how the determinants of health are likely to positively or negatively influence the health of various characters.
Enjoying a good standard of health is a fundamental right of all Australians. This makes health more than just an individual responsibility. Governments and the communities in which we live both have a major responsibility to provide people with the opportunity to achieve the highest standard of health possible.

For individuals to change their health decisions and behaviours, the social and environmental forces that impact on these decisions and behaviours must firstly change. Addressing social, economic and environmental factors that contribute to poor health requires action from all levels of government. This action needs to involve a range of sectors working together, including health, housing, employment, education and community services. It is only through this type of collective approach that the key social, economic and environmental determinants that affect health are likely to improve.

**SUMMARY**

- The major factors that influence an individual's health can be referred to as the determinants of health. These determinants include a number of individual, socioeconomic, sociocultural and environmental factors.
- An individual's health status can be positively or negatively affected to varying degrees by these determinants acting in various combinations.
- Individual factors that have a significant influence on health include genetics, knowledge and attitudes.
- Sociocultural factors such as family, peers, media, culture and religion can exert an influence on people's values, attitudes and knowledge about health, which can impact on their lifestyle behaviours and health decisions.
- Differences in people's level of income, education and employment can lead to significant differences in the opportunities, choices and risks that affect their health. Groups in society that experience the greatest disadvantage are likely to experience the poorest levels of health.
- Geographic location can impact on a person's health by affecting their opportunities to make healthy choices, the risks they are exposed to and their access to adequate standards of housing, food and water. It can also influence their ability to quickly and easily access appropriate health care. Technology has helped overcome some barriers caused by geographic isolation.
- We may have little or no control over some of these determinants; for example, genetics and some environmental factors.
- Most health determinants are modifiable, that is, people can make changes to some factors that influence them to improve their health status. A person's level of self-efficacy, empowerment and attitude can contribute to the degree of control they exercise over their health.
- The influence that various determinants can have on our health changes throughout our lifetime. This may lead to improvements in health or may contribute to the health risks people face.
- An individual view of health suggests that the individual is solely responsible for their health behaviour. This has limitations for changing individual motivations and behaviour as it blames the 'victim' rather than explaining the social and environmental determinants involved.
• Viewing health as a social construct enables us to recognise the interrelationship between the various determinants of health, and understand why some individuals and groups have better or worse health than others.

QUESTIONS

Revision

1. ‘People’s social and economic circumstances and environmental factors strongly affect their health.’ Evaluate this statement. Does it provide a good explanation of how health is determined? (P3) (4 marks)

2. Table 2.1 on page 70 shows that people in the most socioeconomically disadvantaged groups were more likely to smoke, eat less fruit and vegetables and be inactive than those in less socioeconomically disadvantaged groups. Discuss why these risk behaviours are more likely to be prevalent among people living in poor socioeconomic circumstances. (P3, P16) (5 marks)

3. Using relevant examples, explain how sociocultural factors such as family, peers, media, religion and cultural background can have a positive or negative influence on a person’s level of health. (P3) (3 marks)

4. Outline how living in geographically remote areas can affect a person’s level of health. (P3) (2 marks)

5. Using relevant examples, discuss the interrelationship of the various determinants of health. Explain how this interaction could have upon people’s ability to effectively manage their own health. (P3, P4) (6 marks)

6. Identify aspects of health that an individual is able to exert some control over. Explain how this can be done. (P4) (4 marks)

7. A person who is overweight is told by people that it is their own fault because they lack willpower and are too lazy to exercise. Challenge these comments by analysing the determinants of health that influence people’s activity levels and eating habits that are difficult for them to control. (P3, P4) (6 marks)

8. Discuss how and why the determinants of health can explain differences in the health status of two distinctly different social groups; for example, people born in Australia and people born overseas; Indigenous and non-Indigenous people; people of high and low socioeconomic status. (P3) (6 marks)

Extension

1. Research has shown that a large number of young people with serious mental health problems do not access professional help. Analyse how the various determinants of health may impact on the likelihood that a young person will access support to help with mental health problems. (8 marks)

2. Figure 2.11 (page 68) shows significant differences in the mortality rates of Indigenous and non-Indigenous people. Critically analyse the impact of the various determinants on the health of Indigenous Australians to explain the significant gap that is evident between their health and the health of non-Indigenous Australians. In your response, highlight how various determinants are interrelated. (8 marks)

Note: For an explanation of the keywords used in the revision questions above, see Appendix 2, page XXX.

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