Section A – Introduction to Health/Personal Health

Question 1 Criterion 8

Question 1 was a reasonably straight forward data analysis, and most students were able to score well. Students are reminded though that they only have 10 minutes to answer each Criterion 8 question, so they need to be concise in their responses. Many students gave too much detail when only a brief answer and piece of data was required.

Solutions

a) What was the total number of fatalities in 2022? Is this an increase/decrease from 2021? **(Include number and percentage).** **2 marks**

- 51 fatalities (1)
- Increase of 45.7% or 16 (1)

b) Of the 2022 fatalities, how many were male? Is this higher or lower than the 5-year average for this group? **Use figures from the data in your answer** **2 marks**

- Higher by 15 of than the 5-year average of 24 (1)
- 39 males (1)

c) Of the 2022 fatalities, which gender had the biggest change FROM 2021?
Use figures from the data in your answer **2 marks**

- Females have had the biggest % change of + 50% (from 8-12 fatalities). Males only had a change of 44.4%, which is 5.6% lower than females

d) In terms of age groups, which had the biggest increase in number of fatalities from 2021 to 2022?
Use figures from the data in your answer **2 marks**

- 17-29 years and over 64 years had the biggest increase in number of fatalities (1)
- 9-14 (increase of 5) (1)

e) The under 17-year age group represents **approximately** how many of the fatalities in 2022. **2 marks**

- 1 in 3
- 1 in 8
- 1 in 10
- 1 in 13

Use figures from the data to explain your answer

- approximately 1 in 13 (1)
- Under 17 age group has 4 fatalities in 2022 (½)
- of total fatalities (51) for 2022 (½)

Please note: Examples provided are a guide only. In many examples here, there is way more information than would be required. It is important that all dot points are covered in an answer if full marks are to be achieved.

Question 2 Criterion 1

Solutions

a) Choose a biological/genetic factor (determinant of health) and describe how it might negatively impact health. **2 marks**

Answers must be specific about health impact e.g.

- **Being born a girl** – discrimination in many LDCs, sexually abused – more likely to get HIV, pregnant at early age can lead to health issues like fistula, child bride, loss of education, malnutrition – boy fed first, girls less likely to be immunised.
- **Disability** – lower life expectancy, often discrimination leading to mental health issues.
- **Genetic diseases** – e.g. BRAC 1 & 2 gene when present significantly increases the chance of breast cancer.
- **Blood Pressure** – High BP could be a genetic predisposition due to family history. High BP (140/90+) makes the heart work harder and can contribute to atherosclerosis. It could also lead to heart failure, kidney disease, blindness, and stroke in individuals.

b) Describe a specific example of how a young person has advocated for the health of adolescents. Identify one strategy that was used in this advocacy process. **2 marks**

Answers may be local or international example. Identify the person, the issue being advocated and a strategy for advocacy used in the process.

- **Grace Tame** – issue is sexual abuse and 'having a voice' after court case. Originally was illegal to do so in Tasmania. She lobbied politicians, spread her message through social media (Facebook, Twitter, Instagram).
- **Greta Thunberg** – advocating for Climate Change, future health of the world for her generation. She started weekly protests, spread her message on social media, spoke at the United Nations to world leaders.
- **Student council members** – advocating for inclusion and diversity through school-based events such as 'Purple Day'. Students and staff encouraged to wear purple in support.
- **Layla Seen** – Exeter High school student wrote to Government in 2020 requesting that all government schools stock period products for free. Her efforts have now become a reality with all government schools now stocking these products since term 2 2021.

c) What is 'health literacy' and how is it related to 'health promotion'. Provide a specific example to reinforce the interrelationship between the two. **3 marks**

Health literacy relates to how people access, understand and use health information in ways that benefit their health. People with low health literacy are more likely to have worse health outcomes due to lower participation in preventative programs (including influenza vaccination and cervical and breast cancer screening) and poor medication adherence.

Health promotion is the process of enabling people to increase control over, and to improve, their health. Health promotion raises awareness around certain health issues and their risk factors and this in turn increases an individual's health literacy. For HP to be effective it needs to reach its audience in age/cultural related appropriate ways.

For example, during COVID a wide range of health promotions, including tv, radio and social media ads, posters and other awareness campaigns in a range of languages and formats, taught people about social distancing, coughing into their elbows, washing hands regularly. These promotions built health literacy around the topic and gave people the necessary information to assist with managing their overall health thereby reducing spread and overall death rates.

d) Identify a personal skill that is important for adolescent health. Explain why it is important. **2 marks**

Any personal skill will be accepted. The key is to explain what it is and why it is important to adolescent health.

- E.g. – **Resilience** – is the ability to bounce back after disappointment, loss or failure. Resilience builds **mental toughness and overall mental stability** plus the willingness to recognise the importance of **not giving up**. For example – failing drivers licence the first time. Resilience encourages the adolescent to bounce back, look at their errors, practice further to overcome their issues and go for their licence again.
- **Having good communication skills** is an important personal skill that helps an adolescent to advocate/stand up for themselves and others to ensure health and safety e.g. respectfully encourage friends to wear safety gear when skateboarding.
- **Coping strategies** to navigate the demands of school, work and social life can be beneficial.
- **Goal setting** around study and assignments can assist young people to avoid poor academic results.
- **Planning ahead** work rosters and setting limits for work hours can also help young people balance the demands of their life to ensure that time is allocated for recreation and rest.
- Other examples might include **ability to assess risk, courage, ability to ask for help**.

Question 3 Criterion 4

This question produced a wide range of answers. Most students were able to address dot points 1 and 2 effectively but only a few were able to provide a comprehensive response to dot point 3. Stronger answers in this question addressed key adolescent health issues that were well supported by data with numerous community risk reduction strategies.

Solutions

Choose an adolescent health issue (cause of morbidity and mortality) you have studied this year.

- Briefly describe the issue, providing evidence to reinforce its significance.
- Describe two community actions (Government strategy, awareness campaign, support group or others) that aim to reduce the negative impact of this issue?
- How effective have these actions been? **10 marks**

Example 1: Injury sustained due to excessive alcohol consumption. Briefly describe:

The Alcohol and Drug Foundation defines binge drinking generally as "drinking heavily over a short period of time with the intention of becoming intoxicated, resulting in immediate and severe intoxication". Binge drinking can possibly lead to loss of coordination, decreased inhibitions, vomiting, loss of consciousness. Injuries could include broken limbs, bruising, traumatic brain injuries and even death. Drink driving, unprotected sex (increased pregnancy and STIs), increased risk taking e.g., jumping off cliff into water to show off to friends, coward punch, are just some of the negative impacts of excessive drinking that can lead to injury, death and illness.

Evidence:

In Australia, **13% of deaths among Australians aged 14–17** are alcohol-related, and around 200 Australians aged 15–24 are admitted to hospital due to alcohol-related causes each week. (AIHW). Tasmanians aged between 17–25 are at the most risk of being killed or injured on the roads with alcohol being a leading factor.

Community Actions:

Australian Government's National Drug Strategy 2019-2028 – is 'A ten-year framework that aims to reduce and prevent the harmful effects of alcohol, tobacco and other drugs.' It does this through its approach of Harm Minimisation across three principles: Demand Reduction, Supply Reduction and Harm Reduction. Demand Reduction includes delaying the onset of use of alcohol, tobacco and other drugs, which is the age at which a person begins to use drugs. It also includes reducing the misuse of these drugs, as well as providing support for those who are recovering or wanting to recover from use of alcohol, tobacco and other drugs. This can be done through health promotion in various forms such as media and education campaigns, school drug programs, and community programs and services.
Real Mates Don't Let Mates Drink Drive is an example of an awareness campaign that aims to reduce the demand for alcohol when driving. The new Real Mates campaign was launched in September 2022 and targets men ages 17–25. Mateship is important to men in this age group, and so Real Mates uses this idea to convey that a real mate wouldn't let their mate drink drive and possibly harm themselves and others. It also includes the idea that real mates know each other so well that it only takes a look to stop a mate from drink driving. Advertisements use humour to encourage responsible driving behaviour in young men. Real Mates also has merchandise such as hats, t-shirts and drink bottles with their slogan on them. In Tasmania the campaign has partnered with Cricket Tasmania and the Hurricanes to spread the message further.

Effectiveness:

While the campaign has been highly successful in reaching its target audience, it is debatable as to its effectiveness with 17–19-year age group in Tasmania experiencing a 55.6% increase in fatalities. Given previous statistics it could be contended that alcohol would be a leading factor in this increase.

Example 2: Overweight and obesity in children/adolescents. Briefly describe:

Obesity can be defined as excess body weight which accumulates due to an imbalance between energy intake and energy expenditure. Characterised by a BMI of over 25 overweight and 30 Obese, in children/adolescents, it leads to poorer health and wellbeing, worse performance at school, increased health-care costs, and an increased risk of overweight and obesity in adulthood. They may also be subjected to bullying and teasing, which can lead to poorer mental health and overall quality of life.

Evidence:

One in four children are overweight, most commonly between the ages of 16-17 for adolescent males and between the ages of 8—11 for young females.

Aboriginal and Torres Strait Islander children and adolescents, those who have a disability, those who live in inner regional areas, and those who live in the lowest socioeconomic areas, are more likely to be overweight or obese than other children and adolescents. For example, in 2017–18, 2–17-year-olds living in the lowest socioeconomic areas were more than twice as likely to be obese as those living in the highest socioeconomic areas (11% compared with 4.4%). 38% of Indigenous children and adolescent were overweight or obese in 2017–18.

Community Strategies:

Traffic light scheme. Introduced into a number of Australian schools, this scheme involves a colour system for each food; red foods are restricted; orange foods can only be sold in moderate serves and green-labelled foods are nutritious and can be served in appropriate amounts. Strategies such as these support the healthy eating of Australian school children through increased availability and promotion of healthy food and drinks in schools/canteens aiming to prevent the rising trend in adolescent obesity.

feedAustralia, a world leading, nutritional education and preventative health initiative. *feedAustralia* is available to all early childhood education and care providers at no cost and has been built and explicitly trialled to integrate with the Federal Childcare Subsidy System for operational efficiency. Targeting healthy food choices in childhood, it will improve health literacy and the quality of food choices. The free *feedAustralia* App for childcare services and their families integrates *feedAustralia's* nutritional database of over 200 recipes and more than 2,000 ingredients with established nutrient profiles and serve recommendations to make recipes and nutritional information available to parents of children enrolled in childcare services that are currently using f*eedAustralia's* online menu planning tool.

Effectiveness:

Unfortunately reports suggest that Australia has made almost no progress on tracking the obesity crisis in the past five years, particularly amongst low SES and Indigenous young people. Obesity is a worldwide problem. Australian childhood obesity is expected to double by 2035.

Question 4 Criterion 1

To ensure that students demonstrated a broader understanding of the course content, a caveat was included in this question asking students to choose a different issue from the one chosen in Question 3. The overwhelming majority of students were able to do this. Students are encouraged to make sure that they read the whole exam during the allocated reading time to avoid any difficulties presented by a statement such as this. A collective response was developed to address answers that did use the same topic and information from Question 3 and this is included below.

> An "A" answer addresses all aspects of a question *comprehensively*. An answer that doubles up on topics and information doesn't actually address the key point of this question, so it can't be an "A". "B"s are *detailed* responses and while they may not have as much info as an "A", they still address all aspects of a question, so responses that double up on topics and information can't be a "B". "C" responses are *sound/basic* responses that address *most* aspects of a question, so this is the award range where these answers best fit.

Having said that, a "C" is a pass and an answer that goes against the premise of a question so clearly isn't really at a pass standard. With all this in mind, a cap of **"C-"** for Question 4 for answers that double up topics and information with Question 3 will be set.

If students tweak their topics (i.e., Q3 Road Trauma/Q4 Dangerous Driving or Drug Usage/Binge Drinking) they would need to present completely new evidence (dot point 1), new community strategies x 2 (dot point 3) and new assessments of effectiveness (dot point 4) to be marked fully in Question 4. If responses do in-fact do this then they will be marked in the same manner as other answers.

Overall, this question was quite well answered, and most students were able to present a response that addressed the requirements of the question. Stronger responses identified an appropriate adolescent issue and provided a wide range of clear data to support their discussion on the significance of this concern.

Dot points 2 and 3 presented a range of responses with weaker answers giving brief responses or only providing one strategy instead of two. Students are reminded that they need to address every aspect of a question to receive full marks.

Again, dot point 4 presented some difficulties for students as discussions on the effectiveness of the strategies identified were often very limited or lacking in detail or conclusion. Students are encouraged to provide a statement (i.e., "These strategies have been effective in reducing the prevalence of…") when answering a dot point such as this. Strongest responses also included the data that supports such a statement.

Solutions

Choose an adolescent risk-taking activity **that is a different issue from Question 3.**

- Provide evidence to reinforce its significance.
- What factors reinforce or contribute to this adolescent risk-taking activity?
- Identify two personal and two community/government strategies that can be/are being used to help reduce negative outcomes associated with the risk-taking activity you have chosen.
- Assess the effectiveness of the strategies you have chosen.

30 marks plus C7

Any Risk-Taking Activity that adolescents might engage e.g., dangerous driving, alcohol binge drinking, tobacco use, illegal substance use, unintended pregnancy, other sexual activity, sexting and other risky uses of social media, illegal activities like trespassing, stealing and vandalism, truancy, violence/fighting.

Example: Vaping

What is it and evidence to reinforce its risk:

E-cigarettes (vape pens) are battery-operated devices that are used to heat a liquid to produce a vapour, which is then inhaled – mimicking the act of smoking. This is commonly referred to as 'vaping'. E-cigarettes are mostly used to vape nicotine e-liquid solutions. Devices can also be used to inhale other drugs such as cannabis or nicotine-free 'e-liquids' which are made from a mixture of chemicals including solvents, sweeteners, and flavourings such as fruit, lollies, or coffee. Vaping can cause breathing problems, organ damage, addiction and other conditions. The nicotine in e-cigarettes may negatively affect teenage brain development, impacting learning, memory and attention. E-cigarettes are highly addictive meaning

that when someone tries to stop, symptoms include irritability, anxiety, cravings, having trouble concentrating, sleep problems and feeling sad or depressed.

A recent University of Sydney study revealed an increase in e-cigarette usage among teens, with more than 80 per cent of teachers reporting at least some of their high-school students vaping. Across both primary and secondary education, more than half of the teachers said there had been a "deterioration" in students' mental wellbeing, social/peer interactions, and sporting performance, with just under half reporting negative effects on their academic performance.

In Tasmania in 2020-21 – ABS reported that 7.6% of 15–17 and 21.7% of 18–24-year-old groups had vaped at some stage. The report also acknowledged that these rates were from self-reporting and the reality was that rates were likely to be higher.

The Australian Drug Foundation found that:

- Those using e-cigarettes are three times more likely to smoke combustible tobacco than those who have not used e-cigarettes.
- Former smokers who use e-cigarettes are more likely to relapse to current smokers. Between 2016 and 2019, the proportion of people who had ever used e-cigarettes rose from 9% to 11%.
- Of those who had tried e-cigarettes, 18% used them at least monthly compared to 10% in 2016, and 9% used them daily compared to 6% in 2016.
- In 2019, 3% of current cigarette smokers also used e-cigarettes daily and 8% of current smokers used e-cigarettes at least monthly.
- Of those aged 18–24, nearly 2 in 3 (64%) current smokers and 1 in 5 (20%) non-smokers reported having tried e-cigarettes, compared to 49% and 13.6% in 2016.
- Of young adults aged 18–24 who tried e-cigarettes, the majority (74%) said they did so out of curiosity.
- In Australia, around 14% of 12 to 17-year-olds have ever tried an e-cigarette, with around 32% of these students having used one in the past month.
- Students who had vaped most commonly reported getting the last e-cigarette they had used from friends (63%), siblings (8%) or parents (7%). Around 12% of students reported buying an e-cigarette themselves.

Contributing Factors:

The advertising and promotion of vaping products is illegal in Australia. However, companies are using other strategies to target youth. Social media has been found to play a role as both an information source and as a means of exposure to e-cigarette advertising in Australia. Companies are also glamourising their products to seem cool or fun and creating flavours that appeal to young people. There have been a number of studies who have found that e-cigarette flavours which give off the perception of sweetness (such as candy or fruit flavoured) may make buying and trying e-cigarettes more appealing among young people.

Adolescents like to take risks to experiment, fit in with their peers, to rebel against rules, and for curiosity. For example, they may vape more than they want to, just to fit in with friends or due to peer pressure. In addition, communication and decision-making skills may not be so well developed. The most commonly cited motives among the teens were "they think they are cool or intriguing" at 50 per cent and

"they think they are less harmful than regular cigarettes" at 46 per cent. A further 44 per cent of teens used the devices "out of curiosity", while 42 per cent vaped because "a friend uses them" The study suggests many Australian students can readily access e-cigarettes and that vaping in schools is becoming more prevalent, including in primary schools.

Strategies: Personal Strategies.

The nicotine in e-cigarettes is highly addictive. Repeated use causes changes in the brain's reward pathways and alters parts of the brain involved in learning, stress and self-control. This can make it very difficult to stop using nicotine. Nicotine withdrawal can involve intense cravings (particularly for eating), but there are ways to overcome them.

A Plan of Distraction to assist might include:

- Record and remind yourself of the reason why you want to quit, and that the craving will soon pass (usually in a few minutes).
- Distracting the brain by engaging in a hobby, getting some exercise or talking to a friend.
- Chewing gum or eating a healthy snack.
- Using a stress ball, toy or pen to distract the hands.
- Considering Nicotine Replacement Therapy, if cravings are too intense. NRT comes as chewing gum, mints or spray and is available at pharmacies and supermarkets.

Timing – setting a specific date to quit vaping is important because it enhances accountability. It gives a person a chance to prepare and gather supplies to help them through the cravings and stress of the early stages of quitting. Avoid quitting during times of stress; for example, exam times.

Understanding and identifying triggers – A trigger is a feeling, activity, place, time, or anything that will make a person want to vape. Spending time with friends or going through stressful events are common triggers. Knowing what can prompt a strong desire to vape gives a person a chance to develop strategies to help them manage these feelings. They can also take steps to avoid these triggers until they feel more secure in their recovery. Strategies for coping with withdrawals and cravings include seeking professional or medical support, physical activity, meditation and other relaxation techniques.

Strategies: Community Strategies.

The N.S.W Get the Facts – Vaping Toolkit 2022. The campaign is aimed at secondary students and reminds parents, carers, young people, and teachers that vaping is not safe and can have harmful, long-term effects to the physical and brain development of young people. The Vaping Toolkit and campaign is designed to increase young peoples' awareness of the dangers of vaping, and support parents, carers, families, schools and educators, health and community bodies with information and strategies to educate and protect young people from the harms of e-cigarettes. The campaign will target secondary students to raise awareness of the hidden chemicals in vapes, and provide a resource for teachers, parents, and carers to kick start conversations.

The Federal Government is currently deliberating on how to clamp down on the growing black market in disposable vapes being sold to Australian children. From Friday 1 October 2021, all nicotine vaping products – including nicotine e-cigarettes, nicotine pods and liquid nicotine – can only be purchased with a doctor's prescription. This includes both in Australia and from overseas.

Other government's strategies being considered include tougher border controls on the vapes being imported into Australia and increased surveillance of the shops selling them to children. Plain packaging, with health warnings and far fewer flavours would make them less attractive to adolescents and limiting flavours to potentially just tobacco-flavour, not like fruits and lollies.

Smoke free and other e-cigarette laws in Tasmania include:

- You cannot use e-cigarettes in public areas that are smoke free. Smoke free also means vape free.
- Most laws that exist around cigarettes are similar for e-cigarettes.
- A person under 18 years of age cannot buy, possess, or use e-cigarettes.
- A person over 18 cannot give or sell e-cigarettes to a person under 18.
- Shops in Tasmania who sell e-cigarettes require a smoking product licence and can only sell "nicotine free" e-cigarettes to people over 18.
- Pharmacies with a smoking product licence can sell e-cigarettes containing nicotine to people with a prescription from a doctor.
- There are restrictions about displaying, advertising, or selling e-cigarettes to people under 18.
- No promotion allowed for e-cigarettes. No advertising inside store or in public.

Effectiveness of strategies:

At this point in time there is little evidence to assess the effectiveness of campaigns and strategies targeting this risk-taking activity. Reports suggest that more information, in terms of educating teens about the risks involved in vaping, is required. More resources and education is needed, especially in schools and governments, at state and federal level. They need to work together to make policy changes that address this issue. Prohibition is not an effective option, however there is support for increased fines and loss of licences for the illegal sale of vapes to children and adolescents, and for advertising to be restricted and regulated.

Question 5 Criterion 1

Question 5 is a well scaffolded question that breaks the content requested into clear dot points. Some students did have difficulty with the amount of information being requested. As a result, many answers weren't able to provide a comprehensive response across all segments. Stronger responses were able to identify and discuss the elements that make a behaviour a positive risk (i.e. entered into voluntarily, decision made while not under the influence of alcohol or other drugs, steps taken to reduce the potential harm, no peer or social pressure, benefits seen as worthwhile, more likely to have a positive outcome) rather than simply saying a behaviour that wasn't dangerous was therefore a positive risk. Positive risks can still be dangerous and can still result in negative outcomes, but as they are approached in a more "constructive" manner they are less likely to cause damage or concern.

Solutions

Positive risk-taking is a key aspect of adolescent health and growth.

- What is risk taking and why is it a key aspect of adolescent growth and development?
- Identify four typical positive adolescent risk-taking activities.
- What factors make these activities potentially more positive than others?

- Identify some of the key personal skills that could develop from participation in positive risk taking.
- Choose one positive risk-taking activity and outline two actions (individual or community) that might contribute to more positive outcomes for adolescents in relation to this risk-taking activity.

30 marks plus C7

Risk-taking is:

'Exposure to the chance of loss, injury or gain.' A risk is a behaviour where the outcome is uncertain.

Adolescence is filled with uncertainty and young people are trying to figure out who they are in the context of shifting social landscapes, new responsibilities, and more challenging schoolwork. Research suggests adolescents are more willing than adults to lean into uncertainty and explore situations in where there is a potential for a reward but the outcome is not assured. Young people have a tolerance for uncertain outcomes, and this is essential to learning and development during adolescence. **Risk-taking** is important for adolescents as it helps them to explore their boundaries, try new experiences, increase their sense of self-worth, try things outside their comfort zone and learn what they like/don't like to do.

Typical positive adolescent risks might include:

Sport e.g., mountain biking, participating in school production, volunteering in the community, learning to drive, getting a job, starting a new relationship, speaking in assembly, sitting an exam, going away to university.

Why potentially more positive than other risks:

These risk-taking behaviours are more likely to be entered into voluntarily, without peer pressure involved. The adolescent has considered the likely outcomes and consequences of the risk and has made attempts to reduce the chance of any negative outcomes through careful planning. The risks are more likely to have a positive outcome and a benefit that is worthwhile. E.g., If an adolescent is going to go for their P-plates, they would have made sure that they have done the required hours of driving and have learnt the road rules that they need to apply. The risk is positive because, while it still evokes a feeling of uncertainty or fear, there is a possibility to develop a new skill and achieve a positive outcome. For risks such as learning to drive, education is involved, and skill-building is achieved through the learning process. Feedback is given in order to improve as skills develop. These factors make the chance of passing the test and gaining a successful outcome much more likely.

Key personal skills from participating in positive risk taking:

Personal skills including good communication skills, resilience, self-confidence, coping mechanisms when things don't go as planned, better decision-making skills, assertiveness, skills such as first aid, planning and organisational skills, ability to make broader social connections.

For example, by doing the hours and preparation necessary to try to get their P-plates, an adolescent will have had to organise a qualified person to supervise them to do the driving hours, structure their time to allow learning of the road rules and organise themselves to get to the start of the test at the right time and with the necessary documents (logbook, etc).

Example: Positive risk-taking activity – Learning to drive

(Explain why beneficial/positive – e.g., independence, able to get to school, university, work, socialise with friends, learn a new skill, can be a designated driver for mates).

Personal Action:

Take private driving lessons, complete a course e.g., RYDA, do a defensive driving course, practice in a variety of weather situations.

Community Action:

Professional driving instructors e.g., RACT school of driving

***Keys to Drive*:** A program offered by the government for learner drivers until June 30, 2023. The program offered learner drivers and their parents a free driving lesson with an accredited driving instructor. Their objectives included that the learner driver would commit to continuing to learn about road safety, want to access more information, be confident to get started with their driving, and understand the importance of having a safe car to drive. The lessons went for 60 minutes and were available to first time drivers.

***RYDA*:** A program that offers a one-day session for students which provides them with a lot of information about road safety. The program is led by trainer facilitators including police and driving instructors. RYDA provides students with tools, habits and motivation to stay safe on the road whether they are a driver or a passenger in a car. It is offered in over 600 high schools throughout Australia and New Zealand and over 40,000 students participate in it each year.

Government laws and policies: Age restrictions for driving, L-plate system to ensure drivers have enough practise before a full licence, blood alcohol of 0.00, restrictions on the number of passengers in the car for P-plate drivers, in some states P-plate drivers have restrictions on the engine size of car they are allowed to drive.

Section B – Australian Health

Question 6 Criterion 8

To ensure students receive full marks, they are reminded that they need to use the appropriate qualifications for the data figures they are referring to i.e., *per 100,000, per 1000 live births, per million etc.*

Students are reminded that they need to use the exact data rather than estimates to ensure they receive full marks.

It appeared that students jumped between using the graph (Figure 1) and the table (Table 2) when finding data for their answer. The data from the Table 2 was less accurate, resulting in some incorrect answers.

Question 6C was more difficult to interpret and many students used a range of figures in their answers rather than calculating the answer (34 million).

Solutions

a) Which area has the highest overall projected health expenditure in 2022-23? **1 mark**

- Medical Services & Benefits (½)
- $38814 million (½)

b) Which health area had the lowest projected health expenditure in 2020-2021? **1 mark**

- Aboriginal and Torres Strait Islander Health (½)
- $998 million (½)

c) What is the difference in projected expenditure on **General Administration** from 2021-22 when compared to 2022-23? Is this an increase or decrease? **2 marks**

- $34 million (1)
- Increase (1)

d) Discuss the trend in total health expenditure from 2018-19 to 2022-23. **3 marks**

- Total expenditure has increased ever year from (1)
- $80569 million to $89544 (1)
- Increase of $8975 million (1)
- Biggest increase occurred from (1)
- 2021-22 to 2022-23 ($3992 million)
- Smallest increase occurred from (½)
- 2019-20 and 2020-21 ($953 million) (½)

e) Identify and discuss one expenditure area that does not follow this overall trend. **3 marks**

Pharmaceutical benefits and services

- Overall decrease (1)
- Decrease of ($2372 million) (1)
- Range of $13457-$11085 million (1)
- Decreased every year until 2022-23 where it increased from (1)
- $10862-$11085 million (½)

Hospital services

- Overall decrease (1)
- Decrease of ($236 million) (1)
- Range of $1385-$1149 million (1)
- Decreased every year (1)

General Administration

- Overall decrease (1)
- Decrease of ($167 million) (1)
- Range of $3395-$3228 million (1)
- Decreased 2018-19 to 2019-20 then increased in 2020-21, decreased again in 2021-22 then increased in 2022-23 to $3228 million (1 ½)

Question 7 Criterion 2

a) Students generally named all three of the SJP's successfully although the definition often needed more clarity.

b) Far too many old technologies were used to answer this question. Technologies from the 1800s aren't very recent. Markers generally looked for technologies from this century.

c) Some found this question more difficult. Whilst often able to identify three of the risk factors, many weren't always able to provide evidence.

d) Socio-cultural environment often was misinterpreted as physical environment i.e., location/distance from medical facilities. However, a number of good answers incorporated language barriers.

Solutions

a) Define the three Social Justice Principles. **3 marks**

- **Equity** – Fairness – it is not about being 'equal' but about providing those who are disadvantaged with some extra assistance e.g., financially to try and reduce the disadvantage. "Equity means that resources are allocated in accordance with the needs of individuals and populations with the desired goal of equality of outcomes."
- **Diversity** – Acceptance of differences within our community – recognises that our society is made up of a range of different groups and all of these groups will be considered regarding health outcomes. Includes differences in age, gender, physical size, religious affiliation, language, sexual orientation, disability, socioeconomic status, occupational status and geographical location.
- **Supportive Environments** – Caring communities. SE are environments where "people live, work and play that protect people from threats to health and that increase their ability to make health-promoting choices." Groups/policies/programs that support and care for those groups/individuals who may experience disadvantage. SEs are a crucial part of establishing equity as people who have a supportive health environment around them have a greater opportunity to make decisions about their lifestyle behaviours that will improve their health.

b) Identify a recent/modern medical technology and briefly describe how it has been used to improve health. **2 marks**

Any recent/modern medical technology will be accepted. While there is no hard and fast rule here, it is expected that the technology would be something introduced from 2000 onwards. Drugs, surgery, prevention, treatment or curative strategies. Must make mention of how it improves health.

- **Fitbit/Smart Watch** – can track someone's steps to help them maintain an appropriate level of physical activity needed for good physical health. It can give information regarding blood pressure, pulse rate, Kj intake and activity level. This information can be used to help prevent obesity, CVD and diabetes in Australia.
- **An insulin pump** is a small device that can help manage diabetes. It delivers continuous and customised doses of rapid-acting insulin 24 hours a day to match the body's needs. The pump provides insulin to the body in two ways: background insulin and mealtime insulin.
- **COVID- 19 vaccines** – decreases the severity of COVID.
- **Smartphone connected pacemaker devices**.

c) Cancer, Cardio-vascular disease, and Diabetes are three of the top burden of disease groups in Australia. List **three** common risk factors associated with these diseases.

Provide evidence to link one of these risk factors with any of the indicated burden of disease groups.

3 marks

Common risk factors might include: (must make link to specific burden of disease for full marks)

Smoking – Inactivity – Obesity – Genetics - High Blood Pressure.

- **Smoking** is the leading cause of preventable disease in Australia. Smoking accounted for 8.6% of total burden of disease in 2018**.** Smoking increases insulin resistance and is associated with an increased risk of **type 2 diabetes** in both males and females. Approximately 90% of **lung cancer** in Australian men and 65% of lung cancer in Australian women is estimated to be a result of tobacco smoking. Smoking while pregnant increases the risk of **gestational diabetes**. Also, people with diabetes who smoke increase their risk of **CVD** and breathing second hand smoke increases the risk of developing type 2 diabetes. Smoking can also cause 15 other cancer types.
- **Obesity** is the leading cause of **non-fatal** burden of disease and ranks second for overall burden of disease at 8.4%. (2018) Overweight (including obesity) was responsible for over 55% of the total disease burden due to type 2 diabetes, 51% of the burden due **to hypertensive heart disease** and 28% of the burden due to **coronary heart disease burden**. 40% of Australian premature **CVD** mortality is related to overweight and obesity.
- **Physical inactivity** can raise a person's risk of developing type 2 diabetes. Physical activity helps control blood sugar (glucose), weight, and blood pressure and helps raise "good" cholesterol and lower "bad" cholesterol. PA accounted for 2.5% of total disease burden in 2018. In 2018, physical inactivity was responsible for 20% of the total disease burden due to **type 2 diabetes**, 17% of the **uterine cancer** burden, 16% of **coronary heart disease** burden, 12% of **dementia burden**, 12% due to **bowel cancer**, 9% of **stroke** burden and 3% of **breast cancer**.

d) Give an example of how a socio-cultural environment factor (determinant) may limit an individual's ability to access health services in Australia. **2 marks**

- **Lack of employment/Socio-Economic status** – If people do not have a job or are on a very low income (sociocultural determinant), they may not be able to afford transport to their local medical services. For example, if the nearest GP is 20 km away, and public transport is poor, they may have to take an uber or taxi to be able to attend an appointment. They may not be able to afford this.
- **Religion** – some religions insist that women only see female doctors. Sometimes this is not possible thereby making access to health care more challenging. The Seventh Day Adventists will refuse a blood transfusion as it is against their beliefs.
- **Language Barriers** – Indigenous, refugees, migrants all face communication challenges thereby limiting access and understanding.
- **Disability** – mobility issues, hearing or other functioning loss may limit people's ability to access certain health resources, e.g., without ramps or distance from car parks to medical centres. Lack of hearing – not understanding information therefore reluctant to seek help.
- **Discrimination/fear** – LGBTIQ individuals may be concerned about their doctor's views and may fear being 'outed' if they have chosen not to make public their preferences.

- **Lack of education** – lack of awareness about how to access services and what is available. Low levels of health literacy. Lack of awareness of symptoms may also reduce access as unaware there is an issue.
- **Cultural factors** – Health inequity exists among Aboriginal Australians and Torres Strait Islanders, due to cultural barriers, fear of western medicine, living in remote locations far from health services and substance abuse within communities.

Question 8 Criterion 4

Students are reminded to provide depth and detail in their responses rather than simply stating a generic treatment option i.e., 'eat healthy and exercise'.

Dementia answers were common but did not score well because of the lack of treatments/cures.

Students did well with including all three parts of the question in their response. Most were able to provide relevant health promotion and treatment options for their chosen health issue. There was often a lack of detail and supporting data, especially where students needed to provide evidence that reinforces the burden of their health issue. Description of the treatment was also often lacking detail as well.

Better answers included a clear outline of their chosen topic. Including two or more pieces of data relevant to the health issue. Strongest answers related their data to the issue's burden and referred to the number of DALY's associated with the topic.

Most students provided good relevant examples of health promotion used to raise awareness and reflected on how this health promotion prevented the issue. Weaker answers made generalised statements without a specific example i.e., just saying a tv campaign, or awareness day. Treatment options varied, with strong examples given by most students. Weaker answers provided no specific examples.

Solutions

Choose a leading cause of morbidity and mortality in Australia.

- Briefly describe the issue and provide evidence that reinforces the burden of this health issue.
- Provide an example of how health promotion is being used in the community to raise awareness and help prevent this issue.
- Describe a treatment option for this issue. **10 marks**

Leading cause of morbidity and mortality may include: Cancer, Musculoskeletal conditions, diabetes, mental health conditions and substance use disorders, neurological conditions e.g. dementia, CVD, Suicide, Influenza (could include COVID), alcohol induced deaths. At least two up to date statistics that reflect the significance of the health issue.

Example: Diabetes

Briefly Describe:

Diabetes is a disease where the pancreas either does not produce enough insulin or the body becomes resistant to the insulin that is being produced. Insulin is important for transporting glucose from the blood stream into the cells to be used for energy production.

Evidence:

- An estimated 1.2 million Australians (4.9% of the total population) had diabetes in 2017–18. This includes people with type 1 diabetes and type 2 diabetes.
- In 2017–18, the prevalence of diabetes was higher for males (5.0%) than females (3.8%) and increased steadily up to the 75 and over age group, with rates among those aged 65–74 more than three times as high as for those aged 45–54 and 1.5 times as high as those aged 55–64.
- The prevalence of diabetes varied by socioeconomic disadvantage. Numbers were around twice as high among those living in the lowest socioeconomic areas than in the highest socioeconomic areas. Indigenous Australians were almost three times as likely to have diabetes as their non-Indigenous counterparts.
- The impact of diabetes is growing. In the past 20 years, the numbers have dramatically increased by around 220%. If the growth rates continue, there will be more than 3.1 million Australians living with diabetes by 2050 and the annual cost is forecast to grow to about $45 billion per annum in this time.

Health Promotion:

The Lowdown is a social media campaign run by ***Diabetes Australia***, focusing on hypos – a condition when someone's blood glucose level drops too low, below 4mmol/L. The campaign aims to raise awareness of the impact of diabetes on the people who have the condition, hopefully encouraging the public to take measures to avoid developing type 2 diabetes. ***"HyposAddUp"*** was the campaign theme for 2022. The message of the campaign was that all the time taken up managing a hypo takes time away from other, more enjoyable life activities. It gives the diabetes community a chance to tell people about the impacts that managing a hypo has on their life. The campaign is operated through social media and is represented by the logo #HyposAddUp.

Treatment:

Insulin pumps are used to treat diabetes by injecting insulin into the body through subcutaneous insulin infusion. The pumps are worn on the body 24 hours a day and deliver insulin consistently throughout the day according to the body's needs. The insulin pump does not monitor insulin; this needs to be done by the person with diabetes using diabetes testing equipment. The pump uses fast acting insulin which disappears from the person's body quickly when the pump is disconnected. The canula which delivers the insulin needs to be moved regularly to avoid scar tissue. Insulin helps move glucose from the blood stream into the muscle cells to be used for energy production.

Example: Coronary Heart Disease (CHD)

Briefly Describe:

Occurs when a coronary artery clogs and narrows and becomes blocked because of a build-up of plaque. These blockages form because cholesterol builds up in the walls of the blood vessels, forming plaque. Over time, the plaque grows. This makes the blood vessel narrower and allows less blood through. This is called atherosclerosis.

Evidence:

- CHD is the leading cause of death in Australia, representing 5.5% of total individual disease burden in 2022.

- CHD claims more lives than any other disease, responsible for more than one in ten of all deaths.
- One person dies from CHD every half hour, or on average 50 people every day.
- Twice as many males die from coronary heart disease compared to females.

Health Promotion:

The Heart Foundation's mission is to make Australia free of heart disease. The organisation's work focuses on prevention, support, and research to improve the heart health and quality of life of all Australians. It does this through promoting programs, apps and tools designed to raise awareness. Examples include:

- Heart age calculator
- Heart health checks
- Heart Foundation walking program
- Heart healthy recipes.

The Heart Foundation also helps by:

- delivering support for people living with heart disease
- funding life-saving heart research
- guiding health professionals on preventing and treating heart disease
- providing access to resources and education materials about making heart-healthy choices
- advocating to government and industry to improve heart health in Australia.

Treatment:

Coronary heart disease is treated through a combination of lifestyle changes, medicines and sometimes surgery. This will not cure coronary heart disease. However, it will reduce symptoms and lessen the chance of having a heart attack in the future. For example:

Artificial pacemaker surgery – An artificial pacemaker is a small device that is put under the skin of the chest, below the collar bone. One or two wires connect the pacemaker to the chambers of the heart. A pacemaker makes small electrical currents that stimulate the heart muscle and help it pump regularly. A pacemaker's battery can last up to 10 years. Remote monitoring is a way for the implanted heart device to communicate with the doctor or clinic using a small monitor. This information is sent directly to the doctor or clinic providing them with the information to routinely check the device from wherever the patient is located. Remote monitoring is prescribed by the doctor to access information that allows them to manage heart condition and monitor the implanted heart device. The shared information may communicate abnormal heart rhythms or issues with the heart device to the doctor faster.

Question 9 Criterion 2

Better answers defined each environment factor and gave strong examples of factors that limit the health of disadvantaged groups. Strong answers were also backed up with appropriate evidence and health indicators.

Answers that gave specific examples and links to the Social Justice Principals (SJPs) created well-structured responses for dot point three.

Some students confused this section with Global Health and provided 'Global Health' comparisons.

Many students didn't answer the first dot point well, jumping straight into discussing their chosen disadvantaged group rather than looking at common factors that impact all disadvantaged groups. The second dot point was answered well, with stronger responses making clear links between how the factors previously mentioned resulted in poorer health outcomes (with data to support). For the last dot point, weaker responses were able to give an example but didn't link to the previously mentioned risk factors, or didn't clearly state how it met certain SJP's.

Many students used the first dot point to discuss the common factors that limit the health of their chosen disadvantaged group rather than disadvantaged groups across Australia.

Common errors: not addressing each dot point in full. Lack of examples and data, or heath indicators not included.

Solutions

Overall, Australians experience good health, however, there are still a number of groups who experience disadvantage.

- Discuss some of the common socio-cultural, political and physical environmental/lifestyle factors that limit the health of disadvantaged groups.
- Choose a disadvantaged group and provide evidence that reflects the health impact of these common limiting factors (Include health indicator statistics to reinforce your answer).
- For two of the common factors of disadvantage that you have identified, discuss an example of where the Social Justice Principles (SJPs) have been applied to try and reduce the negative impact for the group you have identified.

30 marks + C7

Many of these factors are inter-related further increasing the challenges for disadvantaged groups.

Socio-cultural factors that could limit the health of disadvantages groups could include:

- **Low income.** Unable to afford transport to support services, the cost of support services/medical appointments, medicine, sufficient nutritious food to sustain a healthy body, sufficient clothes, heating or housing to keep their body warm. The costs of resources such as food and petrol increase with increasing remoteness. In very remote areas these are about 15-20% and 10% more expensive than in major cities. This would take money away from their total income which they could use to attend doctor's appointments or purchase medicine.
- **Lack of education**. Leads to low health literacy levels which hampers ability to gain information regarding support services and medical advice.
- **Low levels of support** and a **lack of belonging to groups** – people in this situation may not have a group of friends or support people who they can talk to about issues, problems or to ask advice from.
- **Discrimination.** Marginalised groups may face discrimination based on their race, ethnicity, gender, sexual orientation, or disability status, leading to stress, reduced access to healthcare, and increased vulnerability to mental health issues. Racism and discrimination in healthcare settings can lead to mistrust, poorer communication, and reduced access to appropriate care.

- **Social and economic disadvantages** can increase the prevalence of unhealthy behaviours such as smoking, substance abuse, and poor diet, which contribute to chronic diseases and overall poorer health outcomes.

Political factors that could limit the health of disadvantages groups could include:

- **Limited representation and influence in political decision-making processes**, resulting in inadequate policies and resource allocation for their health needs.
- **Lack of social housing** particularly in regional and rural areas increases level of homelessness and overcrowding, which in turn increase chances for poorer health outcomes.
- **Inequitable Distribution of Resources**. Disadvantaged communities may experience unequal distribution of healthcare facilities, infrastructure, and services, leading to limited access to quality healthcare.
- **Government Policy** – Stolen Generations. The forced removal of Indigenous children from their families has had intergenerational impacts on the health and well-being of Aboriginal and Torres Strait Islander peoples. The Bringing Them Home Report estimated that up to one in three Aboriginal and Torres Strait Islander children were forcibly removed between 1910 and 1970.

Physical/environmental factors that could limit the health of disadvantages groups could include:

- **The state of roads** tends to be narrower with less safety barriers, with also less police to maintain speed limits.
- **Lack of access to clean water** might limit the health of disadvantaged groups. Those living in rural and remote areas are more likely to suffer from chronic health issues and this is a region where access to clean water might be limited. Exposure to water borne diseases such as Hepatitis A or Salmonella might be more common.
- **Barriers to accessing health care**, due to challenges of geographic spread, low population density, limited infrastructure, and the higher costs of delivering rural and remote health care. Australians living in *Remote* and *Very remote* areas experience **health workforce shortages,** despite having a greater need for medical service.
- **Lack of safe housing, green spaces, recreational facilities, and transportation options** can hinder opportunities for physical activity and limit access to nutritious food options.

Lifestyle choices/behavioural factors that could limit the health of disadvantages groups could include:

- Health risk factors such as smoking, overweight and obesity, diet, high blood pressure, alcohol consumption and physical activity can influence health outcomes and the likelihood of developing disease or health disorders.

Example: Disadvantaged groups – Rural and remote

Evidence:

- 31% of the Australian population lives in rural areas and 3% in remote areas. As a result of a number of the factors mentioned previously, mortality rates for people living in rural and remote areas are between 1.1 and 1.2 times higher than those in major cities. People living in rural and remote areas are more likely to die at a younger age than their counterparts in *Major cities*. They

have higher mortality rates and higher rates of potentially avoidable deaths than those living in *Major cities,* including higher rates of suicide amongst farmers and Indigenous population. Land transport accidents were a leading cause of death in *Remote* and *Very remote* areas. The rate of dying due to land transport accidents was nearly three times as high for *Remote* areas and nearly four times as high for *Very remote* areas, compared with Australia overall (AIHW 2022b).

- R&R – higher rates of hospitalisations, deaths, injury and also have poorer access to, and use of, primary health care services, than people living in *Major cities.* In 2019–20, people living in *Very remote* areas were hospitalised at almost twice the rate as people living in *Major cities* and those in *Remote areas* at 1.4 times the rate.
- 32% of current Indigenous population live in *Remote and very remote* areas 2021 (AIHW 2021i). Indigenous Australians have lower life expectancies, higher burden of disease, poorer self-reported health and a higher likelihood of being hospitalised than non-Indigenous Australians (AIHW 2022a; AIHW and NIAA 2020, 2021). Indigenous children are eight times more likely to be the subject of abuse or neglect. In 2018–19, 59.3% of Indigenous population living in R&R areas smoked.
- In 2017–18, R&R were more likely to engage in risky behaviours, such as smoking and consuming alcohol at levels that put them at risk of life-time harm, compared with people living in *Major cities*.
- Domestic violence, sexual health issues including STIs, sexual assault rates are also higher. People living outside *Major cities* were 1.4 times as likely to have experienced partner violence than those living in *Major cities*. Additionally, people living in *Remote* and *Very remote* areas were 24 times as likely to be hospitalised for domestic violence as those in *Major cities* (AIHW 2019).

Social Justice Principle Examples:

- Addressing health inequalities requires a comprehensive approach that addresses these issues through policy changes, social interventions, and improved access to healthcare and resources.
- The Social Justice Principles of **Equity and Supportive Environments** have been applied to address **smoking** and **poor education outcomes** for Indigenous Australians through a variety of approaches; for example, governments have increased funding and support for Indigenous-specific programs and services to address smoking and education inequalities. This includes funding for Indigenous health services, community-controlled organisations, and scholarships and bursaries for Indigenous students. These investments aim to provide better access to healthcare, preventive measures, and educational opportunities for Indigenous Australians. To further address the issue of smoking, various tobacco control programs have been implemented. These programs involve culturally appropriate strategies, community engagement, and health promotion campaigns tailored specifically for Indigenous communities. They aim to reduce smoking prevalence, promote quitting, and provide support for those affected by tobacco related health issues.
- ***Closing the Gap Strategy*** is an Australian government strategy implemented to address health and education disparities faced by Indigenous Australians. This strategy focuses on improving outcomes in areas such as early childhood development, education, employment, and health. It acknowledges the importance of self-determination, community involvement, and cultural competency in delivering effective programs These programs recognise the importance of cultural identity, language, and community involvement in supporting Indigenous students' educational success. They promote culturally inclusive curricula, incorporate Indigenous knowledge systems,

and provide additional support and resources for Indigenous students. The goal is to create a supportive learning environment that values and respects Indigenous cultures and perspectives.

- **Other examples** – *Bulk billing, PBS: Digital Strategy for Rural & Remote Healthcare* (Equity & Supportive environments) *RFDS* (E & SE): Rural Health Policy 2018-2018 will bring 3000 new nurses and 3000 new doctors to communities across the country that need them most. *Angel Flight: Patient assisted travel schemes: Ronald McDonald House.*

Question 10 Criterion 2

Better answers identified all components of the Australian Health Care System and added a clear description of each. Most students could do this correctly. Weaker answers used outdated information or incorrectly stating when Medicare was formed.

Most students could discuss how these components improved health-giving positives. However, many answers lacked specific examples for dot point two. Most students could give sound/basic negative examples of the components. Better answers discussed each dot point in depth, providing specific examples.

Overall, this question wasn't answered as well as Question 9. Responses often lacked detail, and would regularly miss key points of for each dot point e.g., not mention how private health insurance contributes to improving the health of Australians, or not including limitations of the PBS.

Solutions

The Australian Health Care System is recognised as one of the best in the world. Key components include Medicare, the Pharmaceutical Benefits Scheme (PBS), Private Health Cover and the National Disability Insurance Scheme (NDIS).

- Briefly describe each of these components.
- Discuss how these components contribute to improving the health of Australians. Include specific examples.
- Identify and briefly discuss a negative aspect/limitation about each of the healthcare system components.

30 marks + C7

Medicare

Medicare is the insurance scheme that gives Australian citizens and permanent residents access to healthcare, including a wide range of health and hospital services at no cost or low cost. Medicare is funded by Australian taxpayers, most of whom pay 2% of their taxable income to help cover costs. It is also funded through the Medicare levy surcharge – people without private health and earning more than, $90, 000 (individuals) or $180,000 (families) per year have to pay extra tax called Medicare levy surcharge. Medicare covers some or all fees relating to essential healthcare, including: GPs, specialists, tests and examinations (e.g. X-ray), pathology (e.g. blood tests) eye tests, hospitals, surgical procedures. It also subsidises prescriptions through the Pharmaceutical Benefits Scheme.

Improves Health – How?

- Medicare is recognised as one of the best health care systems in the world and a big contributor to our current life expectancy of 83.2 years.

- It allows all people to have basic access to health care and hospitals for free or at low cost. This encourages regular check-ups and early intervention, thereby reducing morbidity and mortality rates. It provides early detection programs such as cancer screening (increases five-year survival rates) and newborn bloodspot screening and free immunisation to protect people against diseases such as COVID, influenza and childhood ones including whooping cough and meningococcal.
- Those with a Health Care card (e.g., low SES, elderly) are generally bulk billed i.e., no cost ensuring those groups who are 'more at risk' have good access to health care.
- Access to Medicare can reduce financial and other stress on individuals and families knowing that they can get medical assistance as required.

Negative Aspect/Limitations:

- Medicare is very expensive and as technology improves so too does the cost. Less doctors are now offering bulk billing which means a 'co-payment'. Given the current home interest rates and rental squeeze many people cannot afford this and are therefore not accessing the health care services they need.
- A number of services are not provided; for example, dental (However, age 2 – 17 years may qualify for Medicare dental care), home nursing care and treatment, ambulance services (however, this is covered in some states e.g. Tasmania), most allied health services (alternative and complementary medicines, e.g. yoga, acupuncture.), however if a GP has referred or carrying out the treatment then it may be partially covered.
- Long waiting lists mean many people are living with some sort of disability for long periods of time. This can impact work, family and mental health.
- Ramping is common at many hospitals, where ambulances are lined up outside hospitals because beds are not available.
- Many people who cannot either access or afford a GP are fronting up at Emergency Department at hospitals using valuable time and resources that could otherwise be better utilised for those with more chronic conditions.
- While access is often free and at low cost it does not always meet culturally sensitive needs e.g., the need for female doctors or Indigenous doctors who understand the group they are working with. This means that fear can stop people from accessing the healthcare they need.

Pharmaceutical Benefits Scheme

Covers all Australians who hold a current Medicare card and subsidises a high proportion of subscription medication. It aims to provide essential medicines to those who need them regardless of their ability to pay. The average dispensed price (Patient payment plus Government benefit) per prescription of PBS subsidised medicines increased to $70.65 in 2020-21, compared to $67.34 in 2019-20. From 1 January 2023, people will only pay up to $30.00 for most PBS medicines or $7.30 if they have a concession card. The Australian Government pays the remaining cost. There were 906 different medicines in 5,380 brands listed on the PBS as of 30 June 2021. The Commonwealth subsidises medicines that are necessary to maintain the health of the community in a way that is cost effective.

Improves Health – How?

- As with Medicare, PBS provides heavily subsidised medication. This allows all people to get the treatment they need therefore reducing the negative impact of health conditions and improving quality of life.

Negative Aspect/limitation:

- While Medicare and the PBS have a strong focus on equity, there is still an issue with 'wealth buying health' meaning only those who can afford it get the extra cover and full range of services. This leads to lower life expectancy and higher rates of morbidity amongst some groups e.g., low SES.
- Drugs not covered by PBS require full payment by the patient. This means that only those who can afford them get them.

Private Health Insurance

Individuals purchase extra health insurance over and above Medicare. Currently, a record 14.42 million Australians (55 percent of the population) now have private health cover. The Federal Government offers incentives for some to purchase Private Health Insurance (PHI) e.g., a family on $180 000 or less will receive a subsidy of 24.608% to help cover costs.

PHI covers some of the costs of treatment in private hospitals, and also helps covers extras such as dental, physiotherapy and optical which are not covered by Medicare. It allows a person to be treated in hospital as a private patient (usually meaning their own room plus choice of doctor/specialist). PHI often allows a person to access health service more quickly and avoid the waiting time often associated with Medicare funded procedures.

People with PHI pay less tax – i.e., do not have to pay the Medicare surcharge levy. Examples include St Lukes and Bupa.

Improves Health – How?

- Relieves pressure on the public health care system thereby allowing those who cannot afford PHI to access healthcare more readily.
- Provides those with PHI with more choice of practitioner/services, minimal waiting time, dental, eye, physio and other allied health may be covered/ partially covered. This allows for earlier intervention and the likelihood of quicker and improved health outcomes. Less stress. People can access earlier support to keep healthy e.g., remedial massage, gym subsidies to help maintain fitness.

Negative Aspect/Limitation:

- PHI is expensive, therefore reinforcing the concept of 'wealth buys health'.
- Government subsidy has decreased from 30% making it less affordable.
- Even with PHI, not everyone can easily access specialists e.g., R&R and in states like Tasmania the range of specialists is quite limited thereby reducing the choice.
- Often policies are hard to decipher.
- There can be waiting periods of between 6-12 months when joining up or upgrading meaning access is not immediate.

- Out of pocket costs can still be significant as not everything is paid for e.g., dental rebates are low in comparison to other health care areas.

National Disability Insurance Scheme (NDIS)

Established in 2013 by the Federal Government, the NDIS is a national approach to improving the lives of people with disability, their families and carers. The NDIS works with community, government and industry to provide reasonable and necessary supports for these people so that they can live and enjoy an ordinary life. It does this through the provision of funding, information and capacity building. The NDIS currently supports over 500,000 Australians with disability to access the services and supports they need. This includes supporting 80,000 children with developmental delays.

Improves Health – How?

- The NDIS can provide all eligible people (those with a permanent and significant disability) with information and connection to services in their community, such as doctors, sporting clubs, support groups, libraries and schools, as well as providing information about what support is provided by each state and territory government. This improves health by building greater social connections and support. It also builds health literacy. Low levels of HL are a well-recognised barrier in terms of health outcomes.
- Aims to provide support, both financially and with services that help people with a disability build independence (through appropriate housing), increase their life opportunities and increase their social participation. It provides people with access to new skills, jobs, or volunteering in their community, leads to an improved quality of life, sense of purpose and belonging. It aims to help those with a disability lead an 'ordinary' life. This helps reduce the isolation and sense of discrimination that many disabled people feel.
- Early intervention (EI) programs help set up children with how they will learn and develop later in life. Early support provides the best chance of achieving their potential and reduces the need for long term intervention. EI reduces the impacts of disability or developmental delay and helps build skills for life.
- NDIS funding employs more than 270,000 people and contributes indirectly to the employment of many more workers (building confidence, sense of purpose, skill building).

Negative Aspect/Limitation:

- In July 2022 it was estimated that 4.4 million Australians (18% of population) had a disability. Currently the NDIS only supports approximately 500,000 people. This means that a lot of people miss out or are only able to access it when their disability becomes chronic (much more expensive) rather than providing assistance in the earlier phase when it would be cheaper and provide a better quality of life which is one of the NDIS goals.
- Some participants complained about a lack of transparency in the National Disability Insurance Agency's decisions, that the scheme was "too complex and difficult to navigate" and that NDIS staff did not understand their disability or the challenges they faced in their lives. Some have had difficulty accessing the scheme, inadequate funding of supports, deficit-based assumptions about people, and huge delays in reviews and access requests.
- With NDIS, choices will need to be made and managed by others such as families, guardians and organisations. Inherent in this is the potential for exploitation and unscrupulous service providers;

for example, it could over service and 'cherry pick' users who have the greatest capacity to pay or who are the least expensive to support.

Section C – Global Health

Question 11 Criterion 8

The data question was straightforward, however a considerable number of students had difficulty formatting their answers. Many used too many words when only a date or number was required. Student estimates were very approximate and whilst the graph was not precise, better approximations could have been made in some instances. The use of a clear ruler could alleviate this issue. The term 'decade' proved to be a challenge for many students and some interesting responses were given. Quite a few students wrote all ten years of the 1940s in longhand. Discussing a trend continues to prove challenging for many students. Weaker responses provided a rewrite of every piece of data from the graph. Going through year by year, item by item when the question asks for **overall** is not interpreting the question effectively.

Solutions

a) List the three (3) types of disasters that have caused the greatest number of deaths from 1900s to 2020s. Identify in which decade each of these disasters individually recorded their highest number of deaths. Include approximate number of deaths.

Drought (1)	1920s ½	Approx. 475000 deaths ½
Flood (1)	1930s ½	Approx. 400000 deaths ½
Earthquake (1)	1020s ½	Approx. 40000 deaths ½

b) Which years does the decade of the 1940s refer?

1940 – 1949

c) Discuss the trend for overall numbers of deaths from disasters from the 1900s to 2020s. Use figures from the data in your answer.

- Overall trend is a decrease in deaths (½)
- 1900s saw approx. 140,000-150,000 deaths then decreased to approx. 30,000 deaths in 1910s before peaking in 1920s. (520,000-530,000 deaths). (1)
- (½) Since the 1920s, deaths from disasters have significantly declined from a (1) high of approx. 520,000-530,000 in 1920s (1) to a low of approx. 11,000-12,000 deaths in 2020s. (½) A decrease of over 500,000 deaths per decade.

Question 12 Criterion 3

a) List and define four (4) statistical indicators that are typically used to assess the health of a country.

Successful responses included rate of measurement. One mark for indicator and one mark for definition. Whilst not necessarily incorrect, some students mentioned health indicators for more developed countries rather than ones that say something about the health in LDCs; for example, DALYs and YLL, HALE. Definitions might include:

- IMR – Infant Mortality rate – the probability of dying between birth and exactly one year of age, expressed per 1,000 live births.
- MMR – the maternal mortality ratio/rate is defined as the number of maternal deaths during a given time period per 100,000 live births during the same time period.
- GDP – gross domestic product is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period. Often divided by population to give GDP pp or per capita.
- HIV Rate – the estimated number of HIV cases in a particular country per 100,000 people.
- Literacy levels – refers to the percentage of people at least 15 years old living in a particular country that can read and write.
- Life expectancy – the average period that a person may expect to live. Expressed in years. Access to safe water – is defined as the percentage of the population who have access to improved drinking water sources. E.g., Piped household water connection, borehole, protected dug well.
- Access to sanitation – is defined as the percentage of the population who have access to and are using improved sanitation sources e.g., Flush, or pour-flush toilet/latrine to piped sewer, pit latrine with slab, composting toilet.
- Total fertility rate – the number of children a woman is expected to have in a given country (usually 15–49-year period).
- Health expenditure – general government expenditure ($) on health as a percentage of total government expenditure. Often divided by population to give per capita expenditure.
- Poverty rate – is the ratio of the number of people (in each age group) whose income falls below the poverty line. Rates may vary e.g., in the past USD $1.25 and $2.50 per day have been common measures, but more recently, new global poverty lines of $2.15, $3.65, and $6.85 reflect the typical national poverty lines of low-income, lower-middle-income, and upper-middle-income countries in 2017.

b) Explain one reason why women are important in the delivery of primary health care in Least Developed Countries (LDCs).

Many students misinterpreted this question and gave responses that addressed why women **needed** PHC rather than why women are ideal for **delivering** PHC. Successful responses provided specific examples, for example:

- In many LDCs women are the primary carers of the family and first port of call, regarding health care. They are the primary caregivers during pregnancy, childbirth, and early childhood.
- Female health care providers, particularly midwives and obstetricians, are essential in providing skilled and safe delivery services, prenatal care, postnatal care, and addressing issues related to reproductive health.
- An educated/trained woman passes on her knowledge (in a culturally sensitive way – building trust, establishing rapport) of the importance of breast feeding, immunisation, child health monitoring, education, nutrition, hygiene, family planning, etc. to improve her own health, plus that of her children, and in turn the whole of her community.
- She is key to breaking the poverty cycle through improving the health of her children and future generations so that they can get an education, be employed, earn money, have better access to

health care and resources, thereby improving life expectancy and overall community health and wellbeing.

- Women's importance in the delivery of primary health care in least developed countries stems from their ability to provide gender-sensitive care, address specific health needs, enhance community engagement, empower women, promote preventive health care, and overcome cultural barriers. Their participation is vital for achieving equitable and comprehensive health care services for all populations.

c) What is multi-lateral aid? Describe a specific example of where a multi-lateral organisation is providing aid to a Least Developed Country (LDC).

Many students were uncertain about the concept of multilateral aid, leading them to mistakenly equate it with either Humanitarian NGOs or bilateral aid in their responses. Examples include:

- Multi-lateral aid refers to money provided by donor countries e.g., Australia to a particular organisation e.g., World Bank, UNAIDS or World Food Program who then direct this to various countries dependent on need. E.g., In 2020-21 Australian government gave $21 million to the United Nations Children's Fund (UNICEF). Multilateral aid pools resources enabling the implementation of large-scale programs that are beyond the capacity of individual donor countries through bilateral aid.
- The World Food Program works in 123 countries and provides programs wherever there is food insecurity. E.g., WFP provides school lunches in many countries of the world to improve nutrition and encourage school attendance. This aid also improves the economy as food is often sourced from local farmers.
- UNAIDS is an example where multilateral aid is being used to tackle the AIDS epidemic. It is leading the global effort to end AIDS as a public health threat by 2030 as part of the Sustainable Development Goals. They have been working in Ethiopia to decrease AIDS related deaths through the availability of ART (Antiretroviral Therapy) treatment between 1990 and 2020. Currently there are 480,000 people in Ethiopia who have living with HIV and on ART. This represents 78% of all people in Ethiopia with HIV

Question 13 Criterion 4

Any typical LDC health issue was acceptable e.g., malaria, HIV, TB, fistula, nutritional disorders such as malnutrition, diarrhoea, Ebola. Better answers provided relevant statistics and included risk factors such as climate, lack of education around safe sex, lack of trained midwives, lack of food due to drought, poverty, war, lack of access to safe water and sanitation. Chosen strategies currently implemented in a LDC and supporting evidence of efficacy were clearly outlined in better answers. Weaker answers didn't link a strategy to the actual issue; for example, The LifeStraw is not the best strategy to address Malaria. It is linked but there are better examples of addressing Malaria. There were also several Food and Nutrition type answers for malnutrition, the terminology of food choices, food production, food miles etc. was prevalent. It is essential to use health terms and content. Better responses also discussed the issue in terms of LDC's in general rather than wasting time profiling a country first.

Solutions

There are many health issues that impact people living in Least Developed Countries (LDCs).

- Describe one health issue and include evidence to reinforce its significance.

- Identify key risk factors that cause this issue.
- Choose and discuss a strategy that is being used to prevent and/or treat this issue in LDCs.
- How effective has this strategy been? **10 marks**

Example: Malaria

- Malaria is a mosquito-borne infectious disease caused by the Plasmodium parasite. Malaria may cause anaemia and jaundice (yellow colouring of the skin and eyes) because of the loss of red blood cells. If not promptly treated, the infection can become severe and may cause kidney failure, seizures, mental confusion, coma, and death. Malaria places a significant economic burden on least developed countries. The disease leads to increased healthcare costs, reduced productivity, and loss of income. According to the WHO, malaria-related absenteeism and treatment costs can result in a 1.3% annual reduction in economic growth in countries with high transmission rates.

Evidence to reinforce the significance of malaria:

- Malaria is a major contributor to the global burden of disease, particularly in low-income countries. According to the World Health Organisation (WHO), in 2019, there were an estimated 229 million cases of malaria worldwide, leading to approximately 409,000 deaths. About 94% of malaria cases and deaths occurred in the WHO African Region, which is home to many least developed countries.
- Malaria has a particularly devastating impact on children under the age of five. According to the WHO, in 2019, malaria caused an estimated 274,000 deaths among children in this age group. Malaria-related deaths in children can be attributed to severe anaemia, cerebral malaria (a severe form of the disease affecting the brain), and other complications.

Key risk factors can include:

- Malaria is prevalent in tropical and subtropical regions of the world, primarily in Africa, Asia, and Latin America. Countries with high transmission rates include those with suitable climate conditions for mosquito breeding and survival, such as areas with standing water.
- Factors such as temperature, humidity, rainfall patterns, and altitude affect mosquito breeding, parasite development, and mosquito survival rates. Areas with high humidity and temperatures between 20-30°C (68- 86°F) are conducive to malaria transmission. Countries where temperatures rarely drop below 16 degrees are particularly susceptible.
- Outdoor activities during peak mosquito biting times (dusk and dawn).
- Inadequate use of personal protective measures (e.g., insecticide-treated bed nets, repellents).
- Lack of access to proper healthcare and diagnostic facilities.
- Poor housing conditions with inadequate mosquito control measures e.g., refugee camps.
- Migration and movement of populations to and from malaria-endemic areas.
- Certain populations, such as young children and pregnant women, are particularly vulnerable to malaria. Factors like reduced immunity and physiological changes during pregnancy increase their susceptibility to infection and adverse outcomes.
- The emergence and spread of drug-resistant strains of Plasmodium parasites pose a significant risk

factor for malaria control and elimination efforts.

- Resistance to commonly used antimalarial medications, such as chloroquine and sulfadoxine-pyrimethamine, can reduce treatment efficacy and contribute to increased malaria transmission.
- Regions affected by conflict or natural disasters often experience breakdowns in healthcare systems, displacement of populations, and disruption of control measures. These situations create ideal conditions for increased malaria transmission and make it challenging to implement effective prevention and control strategies.

Strategy:

- Distribution and promotion of insecticide-treated bed nets (ITNs). ITNs are specifically designed to provide a physical barrier against mosquito bites while also being treated with insecticides, usually pyrethroids, to kill or repel mosquitoes that come into contact with the net.

How Effective:

- ITNs have proven to be highly effective in reducing malaria transmission and have contributed significantly to the reduction of malaria-related morbidity and mortality in many regions. Currently around 57% of people living in LDCs have access to ITNs. They are cost effective and cheap. A study in Ethiopia demonstrated that ITN usage reduced the incidence of malaria in children under five by 50%.

Question 14 Criterion 3

Both extended answer questions posed significant challenges. Although Question 14 emerged as the most commonly chosen option, numerous students faced difficulties in effectively addressing each dot point. Additionally, some students opted to ignore the question entirely, instead reproducing what appeared to be a pre-prepared response on Sustainable Development Goals or a Least Developed Country (LDC) they had previously studied. Stronger responses showed a clear understanding of the obstacles to achieving the Sustainable Development Goals (SDGs). Instead of just mentioning the impact, they explained how and why these barriers affected progress. These answers stood out by including data for support and using health-related terms to make their points clearer.

A key strength was the connection made between specific barriers and the relevant SDGs. For example, relating issues like drought and famine/malnutrition to SDG 2 (Zero Hunger) or limited access to clean water to SDG 6. While many responses provided good examples of aid helping with these challenges, tackling the task of presenting three such examples posed a bit of a challenge for some students.

Solutions

The Sustainable Development Goals (SDGs) are a call to action to end poverty and inequality, protect the planet, and ensure that all people enjoy health, justice, and prosperity.

- Identify and discuss three (3) examples of how political, socio-cultural and/or physical environmental factors have been/are limiting Least Developed Countries (LDCs) in achieving the SDGs (1 – 6).
- Clearly identify which of the SDGs (1 – 6) are being impacted by these environmental factors and provide evidence to demonstrate the impact.

- Provide three (3) specific examples of how aid (Government or Non-Government) is trying to reduce these limiting factors.

Good answers will provide three examples with strong back up in terms of impact on individuals and community. They will then link these factors with any of the SDGs – explain how they are impacting or limiting a country's ability to achieve the SDGs.

Better answers will be able to show links between the factor and a number of different SDGs i.e., be able to show the inter-relationship between one environmental factor and how it broadly impacts a country's ability to achieve the SDGs. Evidence provided can include statistical evidence from a particular country (an opportunity to use their knowledge from a country investigated this year) e.g., Country A is not on track to achieve SDG 2 No Hunger due to a three-year long drought that has severely impacted agricultural production and limited access to food.

Examples of aid should focus on strengthening governance structures, promoting transparency and accountability, empowering marginalised groups, enhancing access to resources and technology, and building resilience to climate change and environmental challenges. Examples must link to described limiting factors.

Political Environment:

- War, lack of expenditure on health services and education, historical causes such as trade issues, debt, weak governance structures, corruption, and limited social protection systems can perpetuate a cycle of poverty and prevent effective poverty reduction strategies. According to the United Nations, 10% of the world's population lived in extreme poverty in 2015, with the majority residing in least developed countries. These countries often struggle with weak governance and corruption, making it challenging to implement effective poverty reduction measures and ensure equitable access to resources and opportunities. Additionally, the lack of technological advancements and the digital divide further exacerbate the development gap, making it difficult for these countries to harness the potential benefits of technological innovations for sustainable development.
- Colonisation: locals were removed from their own land so that Europeans could plant cash crops such as coffee, tea, or sugar. This meant that locals did not have land to plant their own crops for feeding their families. They were also paid minimal wages so could not support their families and lived constantly in a poverty cycle. The ongoing fall out from this mean that SDG 1 'No Poverty' would be difficult to achieve for some countries.
- War: impacts all SDGs 1–6. Loss of Infrastructure e.g., hospitals, schools lead to lower health outcomes SDG 3 – Good Health and SDG 4 – Quality Education. Often land mines are placed in agricultural areas limiting crop production therefore impacting SDG 2 – No Hunger. People are forced to flee their country, unable to work or earn an income therefore impacting SDG 1 – No Poverty.

Physical Environment:

- Natural disasters: for example, drought, famine, COVID, mosquitos, lack of safe water and sanitation, climate change, rural versus city living in terms of access. LDCs are more vulnerable to the impacts of climate change, including extreme weather events, rising sea levels, and desertification. Limited resources, inadequate infrastructure, and weak governance make it difficult for these countries to adapt to and mitigate the effects of climate change. Furthermore,

factors such as a heavy reliance on traditional agricultural practices, deforestation, and overexploitation of natural resources, contribute to environmental degradation. This, in turn, affects food security, water availability, and ecosystem services, further impeding sustainable development efforts.

- Lack of access to clean water and sanitation. Access to clean drinking water is paramount to preventing diarrhoea. i.e., water that has not been contaminated by urine or faecal matter. This is not always the case in many LDC countries. According to the World Health Organisation, around 2.2 billion people globally lack access to safely managed drinking water, and 4.2 billion people lack access to safely managed sanitation services. SDG 6 – Clean Water and Sanitation would be hard to achieve due to this factor.
- Natural disasters: Country A is not on track to achieve No Hunger due to a three-year long drought that has severely impacted agricultural production and limited access to food. Droughts and other natural disasters e.g., Ebola, COVID, earthquakes, mud slides, impact SDG 4 – Quality Education as many schools are lost or closed due to these disasters. Many children, especially girls do not return to education once schools are re-opened. Ruin crops – SDG 2 – No Hunger, take away jobs and employment therefore impacting income – SDG 1 No Poverty. (Impact of natural disasters is much the same as War).

Socio-Cultural Environment:

- Treatment of women, gender/sexual discrimination, ethnic divisions, – limiting education, religion, lack of access to culturally suitable health resources including trained midwives, lack of access to modern contraception, socio-economic status, poverty, employment levels. As a result, vulnerable groups, such as women, children, disabled and marginalised communities, are disproportionately affected and find it challenging to break free from poverty traps.
- Lack of access to education for girls. Girls are sometimes denied access to the same level of education as boys. They also find it hard to attend when they are menstruating due to lack of resources. According to UNESCO, approximately 262 million children and youth were out of school in 2019, with the majority in least developed countries. Factors like armed conflict, displacement, and poverty hindered access to education. This would affect achieving the targets of SDG 4 'Quality Education' and SDG 5 'Gender Equality'. The aim of SDG 5 is to empower all girls and women to achieve their full potential. This means that they should have the same opportunities as men and boys, and this is not the case in all countries. Education for girls would mean that they have access to paid employment – (SDG1 – No Poverty), sexual and reproductive health rights and real decision-making power in public and private organisations. (SDG 5 – Gender Equality). Her health and those of generations to come would improve i.e., SDG 3 – Health and Well Being.

Three examples of aid: (must link to examples provided & explain how linked)

- **Ryan's Well** is a Canadian charity organisation started by Ryan Hreljak in 1998 after a lesson at his local Primary school. It has provided 1.4 million people with access to clean water, initiated 1724 water projects and built 1321 latrines. Links with SDG 6.
- **Water Aid in conjunction with the Australian Government** provides clean water and sanitation, particularly to women. Running until the end of 2022, Water for Women was a five-year Australian Government program that aims to improve health, gender equality and well-being in the Asia-Pacific through inclusive water, sanitation, and hygiene projects. WaterAid Australia is

being funded to deliver projects in Myanmar, Papua New Guinea, and Timor-Leste. They also ran a five-year sustainable water, sanitation, and hygiene program, aimed at addressing the long-term challenges of sustaining water and sanitation services and hygiene behaviours. Since 1981 they have reached 28.1 million people with clean water, 28.8 million people with decent toilets and 26.1 million people with improved hygiene. Links with SDG 3, 5 and 6.

- **DestaGirl** provides girls with feminine health and hygiene kits so they are more able to attend school more regularly. The program began in 2013 and was a grassroots organisation planning to bring washable, reusable feminine hygiene products to teen students in Ethiopia. Educated girls are less likely to contract HIV and will provide better nutrition to their children. They will have children later in life and are more likely to gain employment. Links with SDG 4 and 5.
- **The World Bank's Governance and Anti-Corruption (GAC)** strategy works with governments and civil society organisations to strengthen public sector accountability and transparency. The GAC program provides funding for initiatives that enhance governance structures, promote citizen engagement, and combat corruption in various sectors, including education, healthcare, and infrastructure. Links with SDG1-6.
- **The United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)** implements various projects worldwide with aid funding. These projects focus on promoting women's economic empowerment, political participation, and access to justice. They work towards achieving gender equality by addressing discriminatory laws and social norms, supporting women's leadership, and improving access to resources and services. Links with SDG 5.
- **The Green Climate Fund (GCF)** is a financial mechanism established under the United Nations Framework Convention on Climate Change (UNFCCC). It provides funding to developing countries, including least developed countries, to support climate change adaptation and mitigation efforts. The GCF finances projects that build climate resilience, promote clean energy solutions, and enhance sustainable development in vulnerable communities. Links with SDG 1,2 and 6.

Question 15 Criterion 3

Fewer students attempted this question; however, it was generally better answered than Question 14. More effective answers included examples of health issues that PHC addressed and the subsequent reduction of risk factors. The answers that were specific included data and detail about what was offered mostly by NGOs.

Solutions

Primary Health Care (PHC) is considered to be one of the most effective ways to improve and sustain health in Least Developed Countries (LDCs).

- Why is PHC considered to be effective and sustainable?
- Briefly describe four PHC components and explain why they are important.
- Describe three examples of how PHC is being implemented in a LDC you have studied.
- How effective have these examples been in terms of helping your LDC improve health and reduce poverty?

Why PHC?

- It is widely regarded as the most inclusive, equitable and cost-effective way to achieve universal health coverage. It is also key to strengthening the resilience of health systems to prepare for, respond to and recover from shocks and crises. Effective PHC is culturally sensitive and works with the community to assess their needs/train locals and thereby providing employment. By empowering communities and tailoring health services to their specific needs and preferences, primary care fosters ownership and sustainability of health interventions.
- PHC places significant emphasis on preventive measures and early intervention. By promoting health education, immunisation, and disease prevention programs, primary care providers can reduce the occurrence and severity of diseases meaning better health outcomes and lower overall medical costs. This cost-effectiveness makes PHC a sustainable approach, particularly in resource-limited settings where funding and resources are scarce.
- PHC is designed to be easily accessible and affordable, particularly for vulnerable populations in least developed countries. It emphasises the provision of services close to where people live, ensuring that communities have access to essential health care without having to travel long distances or incur high costs. This accessibility enhances the likelihood of individuals seeking care when needed, which can prevent the progression of diseases.

Why important? Four examples could include:

- **Immunisation**: Immunisation involves the use of vaccines to stimulate the immune system to produce antibodies, providing immunity, and preventing future infections. Immunisation programs are vital for disease prevention and control, as they significantly reduce the incidence of vaccine-preventable diseases such as measles, polio, hepatitis, and influenza. By promoting immunisation, PHC contributes to reducing morbidity, mortality, and disability, particularly among vulnerable populations such as children and the elderly. Vaccines are also very cost effective and affordable.
- **Safe Water and Sanitation**: Providing communities with access to clean drinking water, adequate sanitation facilities, and hygiene education contributes to reducing the incidence of diseases such as diarrhoea, cholera, and typhoid. Safe water and sanitation interventions are essential for preventing infections and improving the overall health and quality of life for individuals and communities. Proper water and sanitation are a key foundation for achieving the Sustainable Development Goals, including good health and gender equality. By managing our water sustainably, we are also able to better manage our production of food and energy and contribute to decent work and economic growth. Moreover, we can preserve our water ecosystems, their biodiversity, and act on climate change.
- **Maternal and Child Health** refers to the health of women during pregnancy, childbirth, and the postnatal period. Inappropriate timing and spacing, too many pregnancies, unsafe abortion, and insufficient prenatal care and care during delivery contribute to high maternal mortality in developing countries. PHC Includes provision of ante/post-natal support, skilled birth attendants, and access to contraception.
- **Food and Nutrition**: Globally, dietary factors are responsible for about one in five deaths. This aspect of PHC refers to the complex network of food-related activities including the production, processing, transport, marketing, and consumption of food. For example, drought resistant seeds, crop rotation, Plumpy Nut, providing mothers with information around the importance of breastfeeding.

PHC implementation – Cambodia

- **Health Centres and Village Health Support Groups:** Cambodia has established a network of health centres and village health support groups to provide primary health care services at the community level. Health centres are staffed by trained health professionals, including doctors, nurses, and midwives, who offer a wide range of services such as vaccinations, antenatal care, basic diagnostics, treatment of common illnesses, and health education. Village Health Support Groups consist of local volunteers who are trained to provide basic health information, promote preventive measures, and refer individuals to health centres when needed. This decentralised approach helps ensure that primary health care services are easily accessible to people living in rural and remote areas.
- **Maternal and Child Health Programs**: Cambodia has implemented various primary health care programs focusing on maternal and child health. These programs aim to reduce maternal and infant mortality rates and improve child health outcomes. They include antenatal care services, safe delivery practices, postnatal care, immunisation programs, nutrition support, and family planning services. By providing comprehensive care for mothers and children, these programs contribute to improving the overall health of the population and reducing health disparities.
- **Community-Based Health Insurance**: Cambodia has implemented a community-based health insurance scheme called the Health Equity Fund (HEF) to ensure financial protection and access to health care for the poor and vulnerable populations. The HEF program subsidises health care costs for enrolled individuals, including primary health care services. It covers essential services such as consultations, diagnostics, medications, and hospitalisation. This initiative aims to address the financial barriers to accessing health care and promotes the utilisation of primary health care services among the most marginalised populations.

How effective have these programs been?

- Effectiveness of these programs can be seen through increased healthcare access, improved health education, enhanced preventive care, early detection, and referral. They have increased access to prenatal care, skilled birth attendance, postnatal care, and immunisations which has led to a reduction in maternal and child mortality rates, a decline in the prevalence of malnutrition among children, and improved overall health and well-being for mothers and children. Health education sessions have raised awareness about topics such as proper nutrition, breastfeeding, hygiene practices, immunisations, and family planning. By empowering women and families with knowledge and skills, MCH programs have enabled them to make informed decisions regarding their health and the health of their children.
- While MCH programs have had significant positive impacts, there are still many challenges. Cambodia continues to face issues such as limited access to healthcare in remote areas, inequalities in healthcare quality, and ongoing poverty. In terms of SDG 3 achievement – Good Health and Wellbeing, more challenges remain with scores stagnating or increasing at less than 50% of required rate.
- On a more positive note, two decades after its inclusion on the list of the least developed countries, Cambodia has met the graduation criteria for the first time in 2021, with plans to graduate as early as 2027. This is a major achievement, as graduation from the least developed country status means that a country has achieved significant economic and social development goals, some of which can be attributed to the programs indicated.