

## Environmentally Sustainable Primary Care

Edited by Sawyer & Tomson

<https://www.routledge.com/Environmentally-Sustainable-Primary-Care-Good-for-the-planet-good-for-practices-good-for-patients/Sawyer-Tomson/p/book/9781032793573>

### Quiz 3

1. If you do the same journey by bike, on foot or in a car, which one of these people gets the highest exposure to air pollution?  
A The driver of a diesel or petrol vehicle  
B The cyclist  
C The walker  
D The driver of an EV
2. The UK's highest income households consume on average which one of the following?  
A 25% more tonnes of oil equivalents as the lowest 5 %  
B 50% more tonnes of oil equivalents as the lowest 5%  
C 100% more (i.e. doubled) tonnes of oil equivalents as the lowest 5%  
D 200% more (i.e. tripled) tonnes of oil equivalents as the lowest 5%
3. The proportion of the NHS' carbon footprint that is due to medication (including anaesthetics and metered dose inhalers) is which one of the following?  
A 7%  
B 12%  
C 18%  
D 25%  
E 35%
4. Which one of the following dental prevention programmes has the lowest environmental impact?  
A Attendance at a dental hygienist  
B Fluoridation of the local water supply  
C Regular checks and polishes with your dentist  
D Toothbrushing with an electric toothbrush
5. **True or false.** In dentistry, the evidence for single use plastics (SUP) over multi-use instruments does not clearly demonstrate advantages for SUP
6. The average UK household generates 412 Kg of waste per person each year. The waste generated by full-time contact lens wearers represents which of the following proportions of that?  
A 0.01%  
B 0.2%  
C 1%  
D 1.5%

7. An estimated 1.14 billion prescription items were dispensed in England in 2021/2022. How much has this changed compared to 2014/2015?
- A Reduced by 4.6%
  - B No significant change
  - C Increased by 3.3%
  - D Increased by 6.4%
8. How often, according to studies, is medication not taken as intended?
- A Less than 10%
  - B 10-20%
  - C 20-30%
  - D Over 30%
9. **True or false.** Considering pharmaceuticals in the environment which of the following are true?
- A About 20% of oral medicines are excreted in the urine
  - B About 30-90% of oral medicines are excreted in the urine
  - C Pharmaceuticals are easily removed by normal Water Treatment plants (sewage works)
  - D Antibiotics are found unchanged in rivers and coastal areas from human excretion
  - E The commonest pharmaceuticals in the UK's rivers are paracetamol and codeine
10. **True or false.** You need to prove your address to register with a GP.
11. 75% of UK rivers were assessed as posing a serious risk to human health in 2022. Which of the following are found in UK rivers?
- A Insecticides (imidacloprid)
  - B Antibiotics
  - C NSAIDs
  - D Oestrogens
  - E Nanoparticles
12. **True or false.** Taking a lot of medication is commoner as people age. Which of the following is or are true?
- A 30% of people over the age of 70 take 5 or more medications
  - B 50%+ of people over the age of 70 take 5 or more medications
  - C 70% of people over the age of 70 take 5 or more medications
  - D approximately 40% of those over 80 take 8 medications or more
  - E Those living in the most deprived communities are at least twice as likely to receive 8 or more medicines as those in the least deprived communities

13. Carrying out a medication review is sometimes seen as a box ticking exercise but can also be an opportunity to maximise benefits and reduce harm to patients. Which one or more of the following are recommended for medication review?
- A No Tears
  - B 7 steps approach
  - C Identification of higher risk medications e.g. those that can cause AKI
  - D Measuring the ACB
  - E PharmIT
14. Which of the following is *not* a principle of lifestyle medicine?
- A Eat well
  - B Avoid harmful substances
  - C Control BP
  - D Increase physical activity
  - E Develop healthy relationships
15. **True or false.** When looking at SusQI and sustainable clinical care the following are true?
- A The equation and the triple bottom line describing Sus QI is a mathematical one
  - B It's important to start by looking at switching to low carbon alternatives before looking at broad brush areas like prevention
  - C Sus QI is compatible with most other QI approaches but makes Quality improvement able to look at a more complete or holistic context
  - D To achieve rapid progress in QI it is better to have a 1–2-person approach rather than aiming to involve patients or members from across the staff team who are likely to be implicated
16. For which of the following is there evidence of a link to Air Pollution? (Y or N)
- Low birthweight babies
  - Premature birth
  - Childhood asthma
  - Delayed lung development in children
  - Developmental delay
  - Eczema and atopic dermatitis
  - More episodes of wheezing and cough in childhood
  - Atherosclerosis in Childhood
  - Development of Ischaemic heart disease
  - CVA
  - Lung cancer
  - COPD
  - Diabetes (adult onset)
  - Dementia
  - ADHD
  - Contact Deficient Hyper-Zooming Disorder
  - Macular degeneration
  - Cataracts
  - Rhinitis

17. **True or false.** The NHS has divided its carbon footprint into different 'scopes' (from 1-3) and has different target dates for achieving reduction in these. Which of the following statements is or are true?
- A Medication prescribed in primary care would be classified as Scope 2
  - B The practice bill for the gas central heating is scope 2
  - C The travel costs for clinical workers to get to work are scope 1
  - D The NHS target is for 90% reduction in Scope 1 and 2 by 2040
  - E The NHS target for scope 3 is by 2045
18. **True or false.** Air pollution includes a mixture of different compounds which have different sources. Which of the following is or are true in the UK?
- A The biggest cause of PM2.5 by far is residential or small scale burning particularly in fires and solid fuel stoves
  - B Most of nitrogen oxides come from the energy industry
  - C Though the biggest cause of sulphur dioxides is the energy industry, the second biggest cause is residential burning
  - D Almost 90% of ammonia comes from agriculture
19. What proportion of the world's population is affected by freshwater scarcity?
- A 4%
  - B 24%
  - C 40%
  - D 64%
20. Which of the following uses most land in the UK?
- A Solar farms
  - B Christmas tree growing
  - C Golf courses
21. **True or false.** Which of the following statements about soil is or are true?
- A 75% of land-based organisms live in soil
  - B The mycorrhizal network moves energy between plants (including those of different species)
  - C Carbon is stored in soil in vast quantities often linked by glomalin
  - D The damage to soil is a separate issue from the loss of insect and bird biodiversity
  - E There are close parallels between the soil biome and the human gut microbiome