

Cheap to treat (answers on page 43)

Part one

Joseph, aged 2, is brought in by his mother to the visiting clinic in a rural area. He is dehydrated, sleepy, and listless. His mother explains that he has had watery diarrhoea for 4 days. He has not been vomiting and he can 'keep down' small drinks of water. You know that the water supply in his village has not yet been updated, and you suspect a bacterial or amoebic cause for his diarrhoea. You have to decide on emergency treatment.

- Q1 Which of the following immediate treatments gives Joseph the best chance of survival?**
- (a) Antibiotics by mouth.
 - (b) An anti-amoebal agent by mouth.
 - (c) A combination of (a) and (b).
 - (d) An anti-diarrhoeal agent such as Lomotil (diphenoxylate and atropine).
 - (e) Intravenous fluids.
 - (f) Oral rehydration salts by mouth.
 - (g) The addition of zinc to oral rehydration salts by mouth.

Part two

- Q2 Which of the following measures, regardless of Joseph's case, would have the fastest impact on reducing morbidity and mortality from childhood diarrhoea?**
- (a) Rotavirus vaccination.
 - (b) Planning and implementing good water quality.
 - (c) Improving sanitation and sewage services in both rural and urban areas.
 - (d) Reducing the costs of antibiotics and antibacterial agents.
 - (e) Making oral rehydration salts treatment much more easily available.

Part three

Joseph quickly recovered on the treatment that was implemented in the clinic.

- Q3 In what proportion of clinics in rural Africa is this treatment routine today since its promotion and institution in the early 1990s?**
- (a) More than half.
 - (b) Around 30%.
 - (c) Fewer than 1%.
 - (d) All of the clinics.

Part four

- Q4 One possible difficulty with this treatment is that it may cost too much for rural communities in countries with very low funds for health and medical care. Give your estimate of the cost of the treatment highlighted in the answer to question 1? American dollars are used here for convenience.**
- (a) 10 dollars.
 - (b) 20 dollars.
 - (c) 2 dollars.
 - (d) 50 cents.
 - (e) The answer is not calculable because of the costs to the community of implementing it.

Part five

Acute diarrhoea is the second biggest cause of child mortality in the world, killing 1.2 million children every year. This is 12 years after the announcement of the Millennium Development Goals to reduce child mortality by two-thirds from the levels in 1990. In 2004, the World Health Organization recommended the treatment outlined here to countries with high infant and child mortality rates. Few have taken on the challenge. Those that have done so have made remarkable progress in reducing diarrhoea mortality, although they still face entrenched preferences from health workers for other treatments that do not work.

- Q5 Which of the following countries have taken up the challenge and have been successful?**
- (a) Bangladesh.
 - (b) Benin.
 - (c) India.
 - (d) Nepal.